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Municipality of Singapore

Health Department.

ANNUAL REPORT

for

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HEALTH DEPARTMENT.

Singapore, 26th March, 1940

The President,
Municipal Commissioners,
Singapore.

Sir,

I have the honour to submit my report on the working of the Health Department during the year 1939.

I. NOTIFIABLE DISEASES.

1435 cases were notified against 1801 in 1938 and 1233 in 1937.

The following table shows the comparison between this year and the previous ten years:—

Year	Typhoid Fever	Paratyphoid Fever	Diphtheria	Chicken-pox	Puerperal Fever	Erysipelas	Cerebro-Spinal Fever	Small-pox	Plague	Cholera	Typhus Fever	Scarlet Fever	Anthrax	Leprosy	TOTAL
1929 ..	133	—	57	577	13	8	3	9	3	—	—	6	—	—	809
1930 ..	156	2	63	349	11	9	22	—	—	—	—	2	—	—	614
1931 ..	150	1	65	211	28	6	8	3	—	—	—	—	—	—	472
1932 ..	114	1	124	542	16	2	6	8	—	—	—	1	—	—	814
1933 ..	248	7	244	288	11	5	4	1	1	—	1	—	—	—	810
1934 ..	116	4	254	412	6	5	7	1	—	—	3	2	—	—	810
1935 ..	415	9	193	529	16	5	11	52	—	—	18	—	—	—	1,248
1936 ..	455	6	176	833	22	9	16	1	—	—	15	—	—	—	1,533
1937 ..	222	5	217	709	16	6	17	—	—	—	8	—	1	32	1,233
1938 ..	736	4	262	659	31	11	24	2	—	—	10	—	—	62	1,801
Average for 10 years	274.5	3.9	165.5	510.9	17.0	6.6	11.8	7.7	0.4	—	5.5	1.1	0.1	*	1014.4
1939 ..	186	3	328	787	19	2	20	1	—	—	17	1	—	71	1,435

*Leprosy was only made notifiable in 1937.

The following table shows the incidence by nationalities:—

Disease	Europeans	Eurasians	Chinese	Malays	Indians	Others	Total
Typhoid ..	2	5	132	11	33	3	186
Paratyphoid Fever ..	1	—	2	—	—	—	3
Diphtheria ..	1	14	271	8	13	21	328
Chicken-pox ..	7	44	179	25	530	2	787
Puerperal Fever ..	—	1	13	1	4	—	19
Erysipelas ..	—	—	1	—	1	—	2
Cerebro-spinal Fever	—	—	7	—	13	—	20
Small-pox ..	—	—	1	—	—	—	1
Plague ..	—	—	—	—	—	—	—
Cholera ..	—	—	—	—	—	—	—
Typhus ..	2	—	5	—	10	—	17
Scarlet Fever ..	—	—	1	—	—	—	1
Anthrax ..	—	—	—	—	—	—	—
Leprosy ..	—	1	56	—	12	2	71
Total ..	13	65	668	45	616	28	1,435

The following return shows the number notified for each month of the year:—

DISEASE	January	February	March	April	May	June	July	August	September	October	November	December
Enteric Fever ..	10	16	21	11	20	18	14	21	17	14	15	9
Paratyphoid Fever .	—	—	1	—	—	—	—	1	—	—	1	—
Diphtheria ..	20	22	23	32	60	26	34	23	17	36	22	13
Chicken-pox ..	76	84	130	90	60	59	50	30	30	62	52	64
Puerperal Fever ..	2	4	—	1	1	2	2	1	4	—	1	1
Erysipelas ..	—	—	—	—	—	—	—	—	—	2	—	—
Cerebro-spinal Fever	3	—	1	4	1	2	—	—	2	3	1	3
Small-pox ..	—	—	1	—	—	—	—	—	—	—	—	—
Plague ..	—	—	—	—	—	—	—	—	—	—	—	—
Cholera ..	—	—	—	—	—	—	—	—	—	—	—	—
Typhus ..	4	4	—	2	—	—	—	—	1	2	2	2
Scarlet Fever ..	—	—	—	—	—	—	—	—	—	—	1	—
Anthrax ..	—	—	—	—	—	—	—	—	—	—	—	—
Leprosy ..	5	2	2	7	4	16	12	8	7	4	4	—
Total ..	120	132	179	147	146	123	112	84	78	123	99	92

Apart from one case of Smallpox, we enjoyed another year of complete freedom from the dangerous infectious diseases, Smallpox, Cholera and Plague.

The case of Smallpox was in a young Chinese girl who had lived at 50, New Market Road for at least five months prior to the date of onset of the disease. Though exhaustive enquiries were made the source of the infection could not be traced, and no connection with any previous case could be established. Contacts to the number of 38 were sent to St. John's Island to undergo the usual period of quarantine isolation.

Except for the decrease in the incidence of Typhoid, and the increase in the number of Diphtheria cases notified, both of which will be referred to later, nothing in these tables calls for special comment.

It might, however, be as well to point out that the increased incidence of the Typhus-like diseases is probably due to improved diagnosis rather than to a true increased incidence in these diseases. Weil-Felix reactions are now carried out in all suspicious cases, and some positive reactions have been obtained which have enabled a diagnosis to be made which otherwise would probably have been missed.

Under the heading of Typhus in our returns are included Rural-type Tropical Typhus, Japanese River Fever and Urban type Tropical Typhus. Epidemiological evidence has been obtained that T. akamushi and T. deliensis are the vectors of Rural-type Tropical Typhus and Japanese River Fever which are now considered to be the one disease. There is laboratory evidence that the virus of the Urban type can be transmitted by the rat flea. Louse-born typhus has not been seen in Singapore or Malaya.

With regard to Leprosy, it is possible that the increased number of cases notified is due to earlier and improved diagnosis, and to patients coming forward more readily for advice and treatment. With the relaxation of the conditions, under which cases may now be treated in their homes, under the new Leper Rules which came into force during the year, there is probably less inducement to conceal cases of this disease.

The usual routine rat-trapping laid down by the International Sanitary Convention was carried throughout the year. 3,283 rats, trapped in the Town and Port areas, were examined in the laboratory. None was plague-infected. The flea index remained low, being only 1.08 per live rat against 1.06 in the previous year. Full details will be found in the Bacteriologist's report, which is appended.

It may be of interest to record that 4 deaths from Leptospirosis (Weil's Disease) and 2 from Encephalitis Lethargica were certified during the year. Particulars of the investigations made to try and establish the source of infection of the Leptospirosis cases are given in the Municipal Bacteriologist's report which is appended.

TYPHOID AND PARATYPHOID FEVERS.

189 (4 Paratyphoid) cases were notified against 736 in 1938, but as there were 61 deaths recorded as due to this disease it is likely that there were many more cases which were not seen by medical practitioners before death, or were not diagnosed and notified.

It is to be noted that practically all of the typhoid and paratyphoid fever deaths in Singapore are certified by the medical staff of the hospitals where bacteriological confirmation is invariably obtained, and where therefore, there is no possibility of these deaths being wrongly certified.

Though the number of cases of Typhoid fever notified during the year was well below the average for the past few years, nevertheless, the position with regard to the prevalence of this disease still remains unsatisfactory, and leaves much room for improvement as will be seen from the table which follows:—

Deaths from Typhoid and Paratyphoid Fevers per 100,000 of the population in England and Wales, in large towns at home, and in Singapore for the past few years.

	1934	1935	1936	1937	1938	1939
England and Wales ..	0.4	0.4	0.6	0.5	?	?
English Towns of more than 50,000 inhabitants ..	0.4	0.4	0.7	0.6	?	?
Scottish Towns of more than 30,000 inhabitants ..	0.4	1.0	0.9	0.3	?	?
Singapore ..	12.8	29.1	32.2	14.6	37.0	10.5

The figures relating to England and Wales and the large towns at home are either taken or calculated from data available in Annual Reports of the Chief Medical Officer of the Ministry of Health and the Annual Epidemiological Report of the League of Nations, 1937.

There is as far as I can see no reason to assume that the fatality rate from Typhoid fever is unusually high in Singapore. In this respect, I may mention that in an investigation carried out some years ago in connection with an outbreak of Typhoid fever in school children, where all absentees were followed up and, when no medical practitioners were in attendance, examined by us, the fatality rate in the relatively small series investigated was found to be only about 10%.

During the year, the Dysenteries were responsible for 219 deaths, (i.e.) a death rate from Dysentery of 37 per 100,000 of the population as against a rate of approximately 0.33 per 100,000 in England and Wales in 1937.

As the intestinal infectious diseases (Typhoid, Paratyphoid fevers, and the Dysenteries) have much in common as to methods by which they may be disseminated, a truer comparison of sanitary conditions and personal hygiene in England and Wales and in Singapore is shown by the following table which gives the deaths from Typhoid, Paratyphoid and the Dysenteries, grouped together per 100,000 of the population here and in England and Wales:—

	1935	1936	1937	1938	1939
England and Wales ..	0.71	0.84	0.84	?	?
Singapore ..	82.9	67.4	52.6	74.7	48.0

The rates for England and Wales were calculated from the estimated mid year populations of England and Wales given in the Annual

Reports of the Chief Medical Officer of the Ministry of Health, and data as regards deaths from Typhoid, Paratyphoid and Dysentery, were taken from the Annual Epidemiological Report of the League of Nations for the year 1937.

It could be argued that the figures shown in the above table are not strictly comparable, inasmuch as the figures, in the one case, are of a country including big towns whereas, in the other, they are of a town only. Nevertheless, they are striking and, I suggest, sufficiently comparable to indicate, in no uncertain manner, the unsatisfactory position as regards the Typhoid fevers and the Dysenteries in Singapore.

It may be significant that with a marked increase in the sale of ice-cream prepared under unhygienic conditions, within the past few years, there has been an increase in the incidence and death rate from typhoid. One wonders whether this was a case of post hoc or propter hoc. The latter possibility is certainly suggested and was proved to be the case, at least in 1938.

The Commissioners' decision reached in 1938, following the large outbreak of Typhoid fever due to ice-cream sold and made by hawkers under unhygienic conditions, was enforced throughout the year.

No hawker's licence for the sale of ice cream was issued until the applicant had arranged to obtain supplies from a manufacturer approved by the Health Officer. The source of supply in the case of each hawker was endorsed on the licence.

Owing to the marked prevalence of Typhoid fever, and probably of carriers, the difficulty of obtaining information of cases or enforcing isolation, the migratory habits of the people and the ignorance of such a large proportion of the population as to the ways and means by which Typhoid infection may be spread, it was decided that no ice-cream should be approved for sale by hawkers, unless the "mix" was pasteurised and then conveyed, without risk of contamination, through the many stages of manufacture to the finished product. This necessitated the use of a pasteuriser, and a plant which provided for steam sterilisation, in situ, of all the internal surfaces of the connecting pipes, cooler, freezer, etc. The finished product had then to be wrapped up at the factory before it was issued for sale by the hawkers.

At the moment there are two factories in Singapore which have the plant necessary to produce an ice-cream which meets with our approval for sale to hawkers, and thence to the public.

I may add that from a practical point of view it has been shown time and again that a safe ice-cream of a exceedingly satisfactory bacteriological standard can be produced in Singapore by means of such a plant as previously mentioned, provided that adequate supervision is exercised and the plant is properly used and cared for.

If it were possible to lay down a bacteriological standard for ice-cream in Singapore it would prove of great value in that it should serve as an effective means of ensuring the maintenance of a high standard of bacterial purity of the ice-cream approved of for sale by hawkers. Such a standard can be constantly maintained only so long as the plant used in the process of manufacture is properly cared for and run under efficient and careful supervision.

With regard to shops and other places, which, though having no licence for the preparation of ice-cream, make it for consumption on the premises or for direct sale to the public, it has not been found possible to do anything to date.

When the question was discussed as to what steps, if any, were desirable to control the preparation and sale of ice-cream in such shops and other places, many difficulties arose.

The Commissioners decided that it was not desirable or justifiable to insist on these shops and places either providing somewhat similar plants to those approved by us for the manufacture of ice-cream for sale to hawkers, or else obtaining all their supplies from a source approved by us, as in the case of hawkers, and suggested the possibility of drawing up modified requirements instead. In view, however, of certain legal difficulties which arose, the matter had to be held in abeyance.

With a plentiful Public water supply, above suspicion, and a milk supply 90—95% tinned, undoubtedly ice-cream is the most potentially dangerous means of dissemination of massive typhoid infections in Singapore, as the ice-cream "mix" is an almost ideal culture medium for the rapid growth and multiplication of the typhoid organisms. Other, though less, important, means of typhoid dissemination as they are not such good culture media for typhoid organisms, remain to be dealt with e.g iced water, ice balls etc., but nothing further can be done until certain legal difficulties have been overcome.

DIPHTHERIA.

328 cases were notified against 262 cases in 1938. 281 cases were admitted into the Middleton Hospital, of which, 57 died, a mortality of 20.3%. Of those treated in hospital, 46 required tracheotomy.

With the appointment of an extra Assistant Health Officer, it was again possible for the department to follow up contacts in houses from which cases had been notified. This has undoubtedly helped to swell the number of cases diagnosed and notified. Of 922 swabs taken from such contacts, 34 or 3.8% were positive. Thus, 34 cases which might have remained at home and spread infection or developed the infection more seriously, were detected early and removed to hospital.

A Diphtheria Immunisation Campaign was started during the year This is referred to later on in the report, and full particulars are given in the Lady Medical Officer's report, which is appended.

GENERAL.

1. Medical Inspection of Passengers.

The Government Health Office issued 70 permits to land. These embraced 102 passengers, of whom 3 failed to report.

2. Houses Quarantined and Disinfected.

3 houses were quarantined and 459 were disinfected.

3. Infectious Persons and Contacts.

664 patients were removed to Middleton Hospital. 28 Smallpox contacts were sent to the Quarantine Station at St. John's Island, 8 bodies

were removed to the Middleton Hospital Mortuary for post-mortem examination, while 80 bodies were buried under supervision.

II. MIDDLETON HOSPITAL.

At the end of 1938, there were 47 patients remaining in hospital while during the year there were 1508 new admissions, making a total treated of 1555. Of these, 1418 were discharged, 104 died and 33 remained in hospital at the end of the year.

Of the 104 deaths, 57 were due to Diphtheria, 7 to Cerebrospinal Fever, 17 to Measles or its complications and ~~25~~ 23 to other causes.

The full report of the Medical Superintendent, Dr. Gilmour, is appended.

I would like to record here that the "iron lung," so kindly presented by Lord Nuffield, arrived safely at the hospital in August. It has already been in use on several occasions.

Middleton Hospital, which was originally designed and staffed for the treatment of the Dangerous Infectious Diseases, Cholera, Smallpox and Plague only, though, subsequently, accommodation was provided also for the treatment of Diphtheria, has for many years, been used, when at all possible, for the accommodation and treatment of certain other infectious disceases such as Measles, Mumps and Whooping Cough etc.

This has caused an enormous strain on the hospital, and it is becoming perfectly obvious that the accommodation and staff provided is totally inadequate to deal with the ever increasing number of patients, suffering from infectious diseases, who now seek admission.

During the year, therefore, the Commissioners approached Government on the matter, and a Committee has been appointed to go into the whole question of hospital accommodation and treatment of all diseases of an infectious nature.

III. VACCINATION.

The following vaccinations were reported:—

	Successful	Modified	Failed	Not Seen	Total
Municipal Vaccinators .	17,638	69	19	1,719	19,445
Private Vaccinators ..	269	—	—	—	269
Medical Practitioners ..	3,016	—	—	—	3,016
Total ..	20,923	69	19	1,719	22,730

The nationalities of those vaccinated by Municipal Vaccinators were Europeans 23, Eurasians 150, Chinese 16,150, Malays 1,817, Indians

738 and Others 567. Of these 10,048 were males and 9,397 females of the following ages:—

Under 1 year	14,935
1 to 2 years	3,245
3 to 5 years	54
6 to 10 years	259
11 to 20 years	207
Over 20 years	745
Total	19,445

14,080 vaccinations were performed at the Depots, 3,754 at Police Stations, 964 at the Child Welfare Clinics and 647 in private houses.

IV. VITAL STATISTICS.

As has been pointed out in previous reports by my predecessor, Dr. Hunter, it is very difficult to arrive at a reliable estimate of the population in inter-censal years, in Singapore. The ordinary methods in use at home are not applicable to local conditions. As has been done within the past few years, the mid-year population for 1939, has been estimated by making use of the formulae put forward by Mr. Vlieland, which were fully discussed in Dr. Hunter's report for 1936.

As in previous years, for purpose of the weekly and monthly statistics during the year, we had to make use of a temporary figure for the total population which was obtained by adding the excess of births over deaths in 1938 to the mid-year population for 1938 as estimated by Mr. Vlieland's method. This temporary figure was 557,404.

Knowing the births and deaths for 1939, the mid-year population for 1939 is now amended, by applying Mr. Vlieland's methods to 583,070. All the statistics and rates to follow are based on this amended estimate of the population, which is distributed by sex and nationality as follows:—

	Males	Females	Total
Europeans	5,724	3,154	8,878
Eurasians	3,636	3,827	7,463
Chinese	268,387	190,918	459,305
Malays	29,471	23,730	53,201
Indians	34,904	10,602	45,506
Others	4,825	3,892	8,717
Total ..	346,947	236,123	583,070

I would point out that the method of estimating the population by means of a formula has been applied to Chinese, Malays and Indians only. With Europeans, Eurasians and Others, the simple method of adding the excess of births over deaths to the number for the previous year has been employed for reasons pointed out in previous reports.

As, during the year under review, a considerable "unknown" increase must have occurred in the numbers of His Majesty's fighting forces and their dependents stationed in Singapore, it must be assumed that our estimate of European and Indian populations is considerably underestimated.

Restricted immigration from China was in force throughout the year. The figures published in the Government Gazette for the year under review show an excess of Chinese arrivals over departures at Singapore of 10,055 (14,339 for the whole of Malaya). The natural increase in the Chinese population was 10,923 but the increase in Chinese population as estimated is 36,616. With so many other factors which may have to be taken into consideration, it is impossible to make any reliable deduction from these figures, but they certainly suggest the possibility that our Chinese population may have been overestimated by the formulae method used.

In this connection I may say that Mr. Vlieland has continued to show a considerable interest in the question of our population statistics, and has, I understand, evolved certain modifications in the formulae which we employ, which tend to give more accurate estimates. Pending, however, confirmation of Mr. Vlieland's latest methods by the Census figures of 1941, it was considered advisable to continue the use of the factors as used in previous years. Thus confusion is avoided, and our figures can be compared with those of previous years.

BIRTHS.

The total number of births registered during the year was 25,537 compared with 23,842 in 1938 and 22,621 in 1937. This represents a 7% increase over the figures for 1938. A study of the tables to follow shows that the increase is mainly accounted for by increased Chinese births.

There were 13,158 male children and 12,379 female born against 12,255 and 11,587 for 1938.

The crude birth rate was 43.80 against 43.66 in 1938.

The following is the number of births for each month of the year, the 1938 figures being also shown:—

Month	1938	1939	Month	1938	1939
January ..	1,761	1,954	July ..	1,912	2,115
February ..	1,771	1,877	August ..	2,037	2,178
March ..	1,961	2,186	September ..	1,993	2,097
April ..	1,823	2,045	October ..	2,247	2,261
May ..	1,983	2,272	November ..	2,306	2,307
June ..	1,985	2,054	December ..	2,063	2,191

And the nationalities were:—

	1938.			1939.		
	Males	Females	Total	Males	Females	Total
Europeans ..	136	110	246	142	137	279
Eurasians ..	91	114	205	98	103	201
Chinese ..	10,250	9,513	19,763	10,933	10,259	21,192
Malays ..	1,027	1,027	2,054	1,105	1,007	2,112
Indians ..	628	683	1,311	754	741	1,495
Others ..	123	140	263	126	132	258
Total ..	12,255	11,587	23,842	13,158	12,379	25,537

There were 672 still births compared with 643 in 1938.

DEATHS.

The total number of deaths for the year was 11,544 against 12,488 in 1938 and the crude death rate 19.80 per 1,000 against 22.87 per 1,000 in 1938.

314 persons died who had been less than 3 months resident in Singapore. Corrected for these the death rate is reduced to 19.26.

The excess of births over deaths was 13,993.

The following return shows the number of deaths and the death rate for each month of the year:—

Month	Deaths	Rate	Month	Deaths	Rate
January ..	920	18.59	July ..	1,114	22.51
February ..	813	18.19	August ..	1,019	20.59
March ..	871	17.60	September ..	978	20.42
April ..	871	18.19	October ..	1,029	20.79
May ..	885	17.88	November ..	1,086	22.68
June ..	899	18.77	December ..	1,059	21.40

The death rates for the different nationalities were:—

	1938.			1939.		
Nationality	Males	Females	Total	Males	Females	Total
Europeans ..	4.99	5.23	5.07	9.08	4.44	7.43
Eurasians ..	11.98	12.76	12.38	12.93	11.24	12.06
Chinese ..	25.13	23.15	24.29	21.47	19.78	20.76
Malays ..	22.22	22.45	22.32	19.65	19.85	19,74
Indians ..	15.49	26.68	17.71	13.09	22.54	15.29
Others ..	10.11	12.63	11.23	12.85	11.05	12.05
Total ..	23.04	22.62	22.87	20.05	19.42	19.80

From the above table it will be seen that there was a decrease in the death rates for the different nationalities except in the case of Europeans, the latter being probably due to the European population being underestimated for reasons previously mentioned.

The following return gives the number of deaths from each cause of disease, by nationality, age and sex. The classification follows that of 1931 Manual of the International List of Causes of Death as adopted for use in England and Wales.

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

I. Infectious and Parasitic Diseases.			Nationality.	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Totals
				M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
1. Typhoid Fever.			Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	
			Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	2	
			Chinese ..	..	..	..	..	..	..	..	..	..	..	1	..	2	1	2	1	1	1	9	2	14	2	3	2	3	2	1	2	..	..	36	13	
			Malays ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	3	..	
			Indians ..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	1	..	1	..	..	..	..	..	..	..	2	2	
			Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	1	1	61
3. Typhus Fever.			Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Malays ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	
			Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
7. Measles.			Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese ..	..	1	6	6	3	2	2	..	3	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14	10	
			Malays ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	24
9. Whooping Cough.			Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese ..	..	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	
			Malays ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
10. Diphtheria.			Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	
			Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese ..	3	..	8	7	9	5	5	2	10	7	4	2	8	5	1	4	..	..	..	..	..	1	..	..	..	..	..	..	..	..	48	33	
			Malays ..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	
			Indians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others ..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	86
11. Influenza.	11a. with respiratory complications.	(1) With pneumonic complications.	Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	1	1	
			Chinese ..	1	2	6	2	..	2	1	1	..	1	3	..	1	1	..	..	..	..	1	1	5	2	7	1	6	2	7	2	..	..	38	17	
			Malays ..	2	..	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	1	..	..	1	..	1	1	..	..	11	2	
			Indians ..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	1	3	
			Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	74
		(2) With other respiratory complications.	Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese ..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
			Malays ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
	11b. Without respiratory complications.	(1) With non-respiratory complications.	Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese ..	1	..	6	2	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1	..	..	..	..	..	1	..	..	..	..	..	11	2	
			Malays ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
			Indians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

I. Infectious and Parasitic Diseases—(*contd.*)			Nationality.	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Totals
				M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
		(2) Without stated complications.	Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese ..	2	1	1	2	1	..	2	1	1	..	1	..	4	3	1	1	2	4	2	4	4	3	1	5	9	5	6	7	..	..	37	36	
			Malays ..	..	..	1	2	1	..	..	..	..	..	..	..	2	3	3	1	1	..	1	3	6	7	9	3	7	1	5	9	..	..	36	29	
			Indians ..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	1	..	1	..	1	2	..	..	4	4	
			Others ..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	147
13. Dysentery.	13a. Amœbic.		Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese ..	..	..	..	..	..	..	..	..	..	..	1	..	..	2	1	..	..	..	1	..	7	1	9	1	11	..	12	6	..	..	42	10	
			Malays ..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	3	
			Indians ..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
			Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	56
	13b. Bacillary.		Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	
			Eurasians ..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
			Chinese ..	2	..	5	1	1	3	..	..	2	2	..	1	..	..	1	..	..	..	..	..	6	2	10	..	11	..	12	1	..	..	50	10	
			Malays ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	
			Indians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	2	..	
			Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	65
	13c. Other or Un-specified.		Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese ..	..	..	1	..	1	1	1	1	1	..	..	..	..	1	2	1	..	..	3	1	8	4	12	6	10	7	15	7	..	..	54	29	
			Malays ..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	2	1	..	1	..	..	2	2	..	..	4	5	
			Indians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	2	..	..	2	..	..	3	3	
			Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	98
17. Encephalitis lethargica.			Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	
			Malays ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	
			Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
18. Cerebro-spinal Fever.			Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese ..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	1	..	..	..	..	..	..	..	5	..	
			Malays ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians ..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	3	..	
			Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8
22. Tetanus.			Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese ..	95	77	..	..	..	..	..	..	..	..	..	..	2	1	3	2	1	..	1	..	..	1	1	..	2	..	..	..	..	..	105	81	
			Malays ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians ..	1	2	..	..	..	..	..	..	1	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	4	2	
			Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	192
23. Tuberculosis of the respiratory system.			Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	2	..	
			Eurasians ..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	4	..	1	1	..	..	7	2	
			Chinese ..	2	..	6	5	6	..	4	2	6	1	5	2	3	3	7	3	18	18	70	39	260	100	270	78	234	55	127	35	..	..	1018	341	
			Malays ..	..	..	..	..	1	..	..	..	..	1	..	..	1	..	1	1	1	2	5	2	16	8	11	8	7	5	5	2	..	..	48	29	
			Indians ..	..	..	..	..	..	1	..	1	..	..	..	..	..	1	..	..	1	4	5	6	22	6	24	7	9	4	6	2	..	..	67	32	
			Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	4	..	3	2	4	1	2	2	..	..	13	6	1565

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

I. Infectious and Parasitic Diseases—*(contd.)*		Nationality.	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Totals
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
24. Tuberculosis of the central nervous system.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	7	9	9	4	3	3	1	2	6	1	7	2	3	..	..	1	..	..	2	1	3	1	2	..	..	..	..	..	43	24	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	..	..	..	..	..	..	..	..	2	2	
		Indians	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	3	..	2	..	1	..	..	..	..	..	..	..	7	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	80
25 Tuberculosis of intestines and peritoneum.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	1	..	..	..	1	2	..	..	..	..	..	..	..	..	..	1	..	..	1	..	2	2	2	1	1	..	1	1	..	..	9	7	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	1	..	1	..	..	..	..	..	4	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20
26 Tuberculosis of vertebral column.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	2	..	1	..	..	..	..	..	4	1	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	2	1	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8
27. Tuberculosis of other bones and joints.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
29. Tuberculosis of lymphatic system (abdominal and bronchial glands excepted).		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Malays	..	..	2	..	..	1	..	1	..	..	..	1	..	..	1	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	3	5	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8
31. Tuberculosis of other organs.	(2) Others sites included under 31.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
32. Disseminated tuberculosis.	(a) Acute.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	4	5	2	3	2	1	..	1	1	1	3	2	..	..	..	1	..	..	4	1	1	..	..	..	..	..	..	..	17	15	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	34
	(c) Not distinguished as acute or chronic.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	1	2	2	2	1	..	..	..	..	1	..	..	..	..	..	..	1	1	..	..	1	1	..	..	..	..	..	7	6	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

I. Infectious and Parasitic Diseases—*(contd.)*		Nationality.	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Totals
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
33. Leprosy.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	2	..	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	3
34. Syphilis.	(a) Congenital Syphilis.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	39	83	6	11	1	2	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	50	96	
		Malays	1	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	
		Indians	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	152
	(b, c) Syphilis acquired or Unspecified.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	3	..	5	..	6	2	..	1	..	..	15	3	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	19
35. Other Venereal diseases.	(1) Gonorrhœal or purulent ophthalmia.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
	(2) Other diseases included under 35.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
36. Purulent infection, Septicæmia.	(a) Septicæmia.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	5	6	6	11	3	1	3	..	4	2	..	1	1	1	..	1	..	1	..	2	3	2	6	..	7	1	..	5	..	..	38	34	
		Malays	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	
		Indians	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	..	1	..	..	1	..	..	5	2	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	83
	(b) Pyæmia.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	2	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	1	1	2	..	3	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	1	..	3	..	1	1	..	..	7	8	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	18
	(c) Gas gangrene.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

I. Infectious and Parasitic Diseases—*(contd.)*		Nationality.	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Totals
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
38. Malaria.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	2	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	5	3	4	5	1	4	4	2	3	3	4	12	1	4	8	5	15	3	42	21	30	16	30	16	14	13	..	..	161	107	
		Malays	..	..	1	1	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	1	1	2	..	..	..	..	..	..	..	..	3	5	
		Indians	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	1	..	4	..	3	..	1	..	1	1	..	..	..	..	12	1	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	2	..	293
39. Other diseases, due to protozoa.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	1	..	..	..	..	..	3	..	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
40. Ankylostomiasis.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	1	..	1	..	1	..	1	..	..	..	1	..	..	..	7	..	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8
41. Hydatid Cysts.	(b) Other organs.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
42. Other diseases due to helminths.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	1	1	4	8	3	7	6	7	3	2	2	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	19	28	
		Malays	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
		Indians	..	..	..	..	..	..	..	2	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	51
43. Mycoses.	(2) Other mycosis.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
44. Other infectious or parasitic diseases.	(6) Other diseases included under 44.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	2	..	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

II. Cancer and Other Tumours.	Nationality	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Totals
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
45. Cancer of the buccal cavity and pharynx.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	3	1	3	1	8	..	..	..	16	2	
	Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	1	..	..	..	2	1	
	Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	21
46. Cancer of the digestive organs and peritoneum	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1	1	..	..	1	3	
	Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	1	1	..	..	2	2	
	Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	1	24	3	48	7	36	15	..	..	112	26	
	Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	..	1	2	1	..	..	..	4	3	
	Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	3	..	..	..	6	..	
	Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	3	..	..	1	3	163
47. Cancer of the respiratory organs.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	
	Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	5	..	11	..	5	1	..	..	22	1	
	Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	2	..	
	Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	26
48. Cancer of the uterus.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	
	Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	9	..	8	..	4	..	..	..	23	
	Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	
	Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	26
49. Cancer of other female genital organs.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	3	
	Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	2	..	..	..	..	..	3	
	Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6
50. Cancer of the breast.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	
	Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	..	5	..	6	..	..	..	16	
	Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	
	Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	2	
	Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	2	22
51. Cancer of the male genito-urinary organs.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	2	..	4	.	..	..	7	..	
	Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	
	Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8
52. Cancer of the skin.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	2	..	
	Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

II. Cancer and Other Tumours—*(contd.)*		Nationality.	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Totals
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
53. Cancer of other or unspecified organs.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	25
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	3	4	2	6	3	4	..	..	..	16	8	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
54. Non-malignant tumours.	(a) Female genital organs.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
55. Tumours of undetermined nature.	(a) Female genital organs.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	2	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	(b) Other sites.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	18
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	3	1	3	..	4	..	3	1	..	..	15	2	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
III. Rheumatism, Diseases of Nutrition and of Endocrine Glands and Other General Diseases																																			
56. Rheumatic Fever.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	23
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	1	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	2	..	2	2	1	3	4	2	1	2	..	..	12	10	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
57. Chronic rheumatism, Osteoarthritis.	(1) Chronic rheumatism.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	(2) Rheumatoid arthritis, osteo-arthritis.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	1	..	..	..	3	..	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

III. Rheumatism, Diseases of Nutrition and of Endocrine Glands and Other General Diseases—*(contd.)*		Nationality.	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Totals
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
59. Diabetes		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	1	1	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	3	2	11	7	11	6	..	..	26	16	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	1	..	3	..	..	..	5	1	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	3	..	2	..	1	..	..	..	7	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	57
60. Scurvy.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
61. Beri-Beri		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
		Chinese	79	36	63	44	8	14	8	5	3	1	6	2	2	6	3	5	8	3	19	12	27	38	40	39	52	18	30	15	..	..	348	238	
		Malays	3	3	4	..	2	2	1	2	..	..	1	1	..	1	..	..	1	1	3	2	5	8	2	9	5	..	..	..	..	..	27	29	
		Indians	2	..	2	1	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	1	1	2	..	1	1	1	..	..	..	..	7	7	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	658
62. Pellagra.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
63. Rickets.	(1) Rickets.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	4	3	6	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	6	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	17
66. Diseases of the thyroid and parathyroid glands.	(a) Simple goitre.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
	(b) Exophthalmic goitre.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	..	..	..	..	1	2	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
67. Diseases of the thymus.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	1	3	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	2	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

III. Rheumatism, Diseases of Nutrition and of Endocrine Glands and Other General Diseases—(*contd.*)			Nationality	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Totals
				M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
69. Other general diseases.	(2) Other diseases included under 69		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	
			Chinese	..	..	..	..	2	..	..	..	..	..	1	..	..	1	..	..	..	..	1	..	4	..	1	2	..	1	..	3	..	..	9	7	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	2	..	..	..	4	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	1	..	..	2	1	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	24
IV. Diseases of the Blood and Blood-Forming Organs.																																				
70. Hæmorrhagic conditions.	(a) Purpura.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
	(b) Hæmophilia.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
71. Anæmia, chlorosis.	(a) Pernicious anæmia.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	2	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
		(1) Splenic anæmia.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
		(2) Other diseases included under 71b.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	..	..	..	1	..	..	1	..	..	..	..	..	1	1	1	2	..	..	..	1	1	..	..	2	1	..	2	..	..	..	7	7	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	1	..	..	..	..	..	2	1	
			Indians	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	2	3	1	3	..	..	..	..	..	9	4	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	30
72. Leukæmia aleukæmia.	(a) Leukæmia.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	2	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	1	1	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

IV. Diseases of the Blood and Blood-Forming Organs—(*contd.*)		Nationality.	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Totals
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
	(b) Aleukæmia (Lymphadenoma.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	2	..	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
73. Diseases of the spleen.	(2) Other diseases of the spleen.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	1	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
V. Chronic Poisoning.																																			
75. Alcoholism (acute or chronic).		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
77. Chronic poisoning by mineral substances.	(2) Other chronic poisoning by mineral substances.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
VI. Diseases of the Nervous System and Sense Organs.																																			
78. Encephalitis.	(a) Cerebral abscess.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	1	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
	(b) Other diseases included under 78.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	2	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

VI. Diseases of the Nervous System and Sense Organs—(*contd.*)			Nationality.	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Unknown		TOTAL		Grand Totals
				M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
79 Meningitis			Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	4	4	8	9	5	..	1	1	1	..	..	2	..	2	3	..	..	..	..	..	4	..	1	..	1	..	2	..	..	..	30	18	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	1	..	..	..	..	..	..	..	..	3	1	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	52
80 Tabes dorsalis (Locomotor ataxy).			Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
81. Other diseases of the spinal cord.	(1) Progressive muscular atrophy.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
	(3) Myelitis of unstated origin.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	2	..	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
	(4) Other diseases included under 81.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
82 Cerebral hæmorrhage, apoplexy, etc.	82a. Cerebral hæmorrhage.	(1) Cerebral hæmorrhage so returned.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	1	1	..	..	3	1	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	1	..	..	2	1	
			Chinese	..	..	..	..	1	..	..	..	..	..	..	..	1	..	2	..	..	..	1	1	1	1	6	7	21	13	22	31	..	..	55	53	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	2	..	..	1	2	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	1	1	1	2	..	..	..	4	3	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	126
		(2) Apoplexy (lesion unstated).	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	4	..	4	6	..	..	9	6	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	18
	82b. Cerebral embolism and thrombosis.	(2) Cerebral thrombosis.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	..	1	5	..	..	3	6	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	2	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

VI. Diseases of the Nervous System and Sense Organs.—(*contd.*)			Nationality.	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Totals
				M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
		(3) Cerebral softening.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	1	1	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
	82c Hemiplegia and other paralyses of unstated origin.	(1) Hemiplegia.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	7	13	..	..	8	16	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	6	1	..	..	6	3	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	1	1	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	37
		(2) Other paralyses of unstated origin.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	1	..	..	2	2	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5
83. General paralysis of the insane.			Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
84. Other forms of insanity.	(a) Dementia præcox.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
	(b) Other condition included under 84.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
85. Epilepsy.			Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
86. Infantile convulsions (under 5 years of age).			Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	
			Chinese	175	95	149	122	52	48	11	13	3	3	3	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	393	282	
			Malays	58	31	69	48	16	17	11	6	5	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	159	105	
			Indians	11	4	4	7	..	1	..	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15	15	
			Others	2	1	..	2	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	3	977

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

VI. Diseases of the Nervous System and Sense Organs—*(contd.)*		Nationality.	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Totals
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
87. Other diseases of the nervous system.	(a) Chorea.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
	(b) Neuritis, Neuralgia.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
	(d) Disseminated Sclerosis.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
	(e) Other diseases included under 87.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	2	..	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
89. Diseases of the ear and of the mastoid sinus.	(a) Otitis and other diseases of the ear.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	1	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	2	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5
	(b) Diseases of the mastoid sinus.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2

VII. Diseases of the Circulatory System—

		Nationality.	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Totals
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
87. Other diseases (heart).		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1	..	..	..	..	..	3	..	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

VII. Diseases of the Circulatory System—(contd.)		Nationality.	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Totals
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
91. Acute endocarditis (heart).	(1) Malignant endocarditis.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	3	..	2	..	..	..	..	..	6	1	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	1	1	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9
	(2) Other acute endocarditis.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	2	..	..	..	1	..	..	..	4	1	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	2	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7
92. Chronic endocarditis Valvular disease (heart).	(1) Aortic valve disease.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	6	1	16	4	18	2	17	6	..	..	57	15	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2	..	..	..	..	..	..	..	3	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	77
	(2) Mitral valve disease.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	2	
		Chinese	..	..	..	..	..	..	..	..	..	..	1	..	2	..	3	1	..	..	..	1	3	6	4	3	2	2	4	3	..	..	19	16	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	38
	(4) Endocarditis not returned as acute or chronic.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	3	1	..	..	4	3	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	1	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	10
	(5) Other or unspecified valve disease.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	3	4	1	1	1	4	..	..	..	11	5	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	17
93. Diseases of the myocardium.	(a) Acute myocarditis.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1	..	..	..	3	..	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5
	(b) Myocardial degeneration.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

VII. Diseases of the Circulatory System.—(*contd.*)			Nationality.	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Totals
				M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
	(b) Myocardial degeneration.	(1) Fatty heart.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		(2) Cardiovascular degeneration.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	1	1	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		(3) Other diseases included under 93b.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1	..	..	1	..	..	3	1	16
			Eurasians	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	2	..	5	2	..	..	8	3	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	(c) Myocarditis not distinguished as acute or chronic.		Europeans	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	2	..	26
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	1	..	..	2	1	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	2	4	2	5	..	..	..	11	5	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	1	1	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	1	..	..	2	1	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
94. Diseases of the coronary arteries, angina pectoris.			Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	38
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	..	..	..	5	..	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	4	..	5	..	2	2	..	..	12	3	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	2	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	4	1	5	..	..	..	..	..	12	1	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	1	1	
95. Other diseases of the heart.	(a) Disordered action of heart.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	15
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	2	..	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	4	..	..	2	2	..	..	3	7	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	(b) Other diseases included under 95.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	(b) Other diseases included under 95.	(1) Dilatation of heart (cause unspecified) Cardiac Dilatation.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

VII. Diseases of the Circulatory System—*(contd.)*	Nationality.	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Totals
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
(b, 2) Heart disease (undefined).	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	1	1	
	Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	3	2	3	7	6	21	10	47	18	..	..	79	41	
	Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	1	1	1	6	2	..	..	8	5	
	Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2	..	1	1	..	..	4	1	
	Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	140
96. Aneurysm.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	6	1	6	1	5	..	1	..	22	2	
	Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	2	..	
	Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	26
97. Arterio-sclerosis. (1) Arterio-sclerosis with cerebral hæmorrhage.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	2	..	
	Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	
	Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2	..	5	4	..	..	8	4	
	Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	
	Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	2	..	18
(3) Arterio-Sclerosis without record of cerebral vascular lesion.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	
	Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	2	..	
	Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	1	15	6	..	..	23	7	
	Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	2	
	Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	2	..	..	1	2	
	Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	39
98. Gangrene. (a) Senile gangrene.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	
	Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	
	Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
(b) Other gangrene.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Chinese	..	..	..	..	..	..	..	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	2	2	
	Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	
	Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	
	Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6
101. Diseases of the lymphatic system (lymphangitis, etc.).	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	
	Malays	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
	Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
102. Abnormalities of blood pressure.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	3	..	4	2	..	..	8	3	
	Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	2	..	
	Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	
	Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

VII. Diseases of the Circulatory System—(*contd.*)		Nationality.	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Totals
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
103. Other diseases of the circulatory system.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	1	1	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
VIII. Diseases of the Respiratory System.																																			
105. Diseases of the larynx.	(1) Laryngismus stridulus.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
	(2) Laryngitis.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
	(3) Other diseases of larynx.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
106. Bronchitis.	(a) Acute bronchitis.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	19	13	26	21	10	4	6	4	5	1	..	3	2	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	69	48	
		Malays	1	1	1	1	2	1	..	2	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	6	
		Indians	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	128
	(b) Chronic bronchitis	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	
		Chinese	..	..	..	..	1	2	1	1	..	1	..	..	..	..	..	..	..	..	..	..	1	1	2	1	16	6	60	22	..	..	81	34	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	5	..	..	2	6	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	9	1	..	..	11	1	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	186
	(c) Bronchitis not distinguished as acute or chronic.	Europeans	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	
		Eurasians	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	
		Chinese	10	7	14	13	10	6	6	..	2	6	2	1	2	2	..	..	..	..	..	..	..	..	..	..	1	..	4	3	..	..	51	38	
		Malays	1	2	5	3	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	5	
		Indians	..	..	1	2	1	1	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	5	
		Others	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	112

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

VIII. Diseases of the Respiratory System—*(contd.)*		Nationality.	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Totals
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
107. Broncho-pneumonia.		Europeans ..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	1	
		Eurasians ..	..	..	2	2	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	4	3	
		Chinese ..	66	37	132	106	62	58	33	29	28	32	23	13	21	21	9	7	2	..	5	3	4	6	8	4	20	..	12	8	..	..	425	324	
		Malays ..	5	2	12	11	9	7	2	..	1	3	1	2	5	1	..	..	..	..	..	..	2	1	..	..	1	1	..	2	..	..	38	30	
		Indians ..	2	2	7	5	2	3	2	4	1	3	..	..	2	1	..	1	1	1	1	1	4	..	2	..	2	..	3	2	..	..	29	23	
		Others ..	..	..	1	..	1	1	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	1	883
108. Lobar pneumonia.		Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese ..	1	4	5	6	3	1	..	2	1	1	..	2	1	1	3	1	2	2	6	1	15	8	19	9	24	7	26	3	..	..	106	48	
		Malays ..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	2	..	1	1	..	1	1	..	1	1	..	..	..	4	6	
		Indians ..	..	..	..	1	1	..	..	..	1	..	..	..	..	..	..	..	3	..	2	1	3	..	1	..	4	..	2	..	..	..	17	2	
		Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	184
109. Pneumonia (not otherwise defined).		Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	
		Chinese ..	20	20	54	58	16	12	10	6	5	2	2	4	4	6	1	2	1	1	1	1	8	9	18	4	21	4	20	2	..	..	181	131	
		Malays ..	2	1	..	2	..	..	..	..	..	..	..	..	..	..	..	2	..	1	..	1	..	1	3	1	..	1	..	1	..	..	5	11	
		Indians ..	3	..	..	1	2	2	1	..	1	1	..	..	..	..	..	1	1	2	..	1	5	1	5	..	..	1	..	..	..	..	18	10	
		Others ..	1	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	2	3	362
110. Pleurisy.	(1) Empyema.	Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese ..	..	..	1	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	1	..	..	4	..	..	..	7	3	
		Malays ..	..	..	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	2	2	
		Indians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14
	(2) Other pleurisy.	Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese ..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	1	..	..	1	..	1	..	..	..	6	2	
		Malays ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	1	..	..	..	..	..	2	1	
		Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11
111. Congestion and hæmorrhagic infarct of lung, etc.	(1) Hypostatic congestion of lungs.	Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese ..	..	..	1	1	..	..	1	1	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	1	..	1	2	..	..	4	6	
		Malays ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10
	(2) Other diseases included under 111.	Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	
		Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	1	..	..	..	..	..	..	..	3	
		Malays ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
112. Asthma.		Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese ..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	3	16	4	12	6	18	7	..	..	50	20	
		Malays ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	..	..	..	..	..	..	..	2	1	
		Indians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	4	..	2	..	..	..	7	1	
		Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	81

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

VIII. Diseases of the Respiratory System—*(contd.)*			Nationality.	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Totals
				M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
113. Pulmonary emphysema.			Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	
			Chinese	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	3	..	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6
114. Other diseases of the respiratory system.	(b) Other diseases included under 114.	(1) Gangrene of the lung.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	3	..	..	..	..	..	5	..	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5
		(2) Other diseases included under 114b.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	1	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	..	2	..	..	..	7	2	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9
IX. Diseases of the Digestive System.																																				
115. Diseases of the buccal cavity pharynx etc.	(1) Diseases of the teeth and gums..		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	
			Malays	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	
			Indians	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	1	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5
	(2) Ludwig's angina.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	2	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	1	..	1	..	..	..	1	..	..	..	8	..	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8
	(3) Diseases of the tonsils.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	
			Chinese	..	..	1	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	4	..	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6
	(4) Other diseases included under 115.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

IX. Diseases of the Digestive System—*(contd.)*			Nationality.	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Totals
				M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
116. Diseases of the œsophagus.			Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	1	..	..	1	..	..	..	..	..	2	2	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6
117. Ulcer of the stomach or duodenum.	(a) Ulcer of the stomach.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	2	5	10	3	13	2	7	4	..	..	35	14	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	1	..	..	..	..	2	1	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	53
	(b) Ulcer of the duodenum.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	2
118. Other diseases of the stomach.	(1) Inflammation of the stomach.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	8	2	5	6	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	..	..	..	1	..	..	16	13	
			Malays	..	3	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	33
	(2) Other diseases included under 118.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2	..	2	..	1	1	..	..	6	1	
			Malays	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	2	
			Indians	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11
119. & 120. Diarrhœa and enteritis.	(a) Diarrhœa and enteritis.	(1) Colitis.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
			Chinese	2	1	4	6	3	1	1	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	8	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	
			Indians	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	22
		(2) Other Diarrhœa and enteritis.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	2	
			Chinese	98	118	98	93	48	40	24	21	17	11	10	7	7	6	..	2	..	..	..	..	3	2	1	..	3	..	1	3	..	..	310	303	
			Malays	15	14	8	8	2	3	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	27	25	
			Indians	5	4	3	9	1	..	1	1	..	..	..	1	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	1	..	..	11	17	
			Others	1	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	698
	(b) Ulceration of the intestines.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	2	1	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
			Others	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	5

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

IX. Diseases of the Digestive System—(*contd.*)			Nationality.	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Totals
				M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
121. Appendicitis.			Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	2	..	2	..	..	..	..	..	..	..	6	..	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	2	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8
122. Hernia, Intestinal obstruction.	(a) Hernia.	(1) Strangulated hernia.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	2	..	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
		(2) Hernia not returned as strangulated.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
	(b) Intestinal obstruction.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	..	..	2	1	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	2	2	..	..	5	1	1	3	..	..	12	7	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20
123. Other diseases of the intestines.	(1) Constipation, Intestinal stasis.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	2	..	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
	(2) Other diseases included under 123.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	2
124. Cirrhosis of the liver.	(a) Returned as alcoholic.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
	(b) Not returned as alcoholic.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	
			Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	17	1	20	6	18	5	..	..	58	12	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	2	2	..	..	..	4	2	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	3	..	2	..	..	..	..	..	6	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	85

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

IX. Diseases of the Digestive System—*(contd.)*		Nationality.	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Totals
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
125. Other diseases of the liver.	(1) Acute yellow atrophy.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	3	..	..	1	..	..	..	..	..	4	4	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	1	..	..	..	..	..	..	..	3	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11
	(2) Other diseases included under 125.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	3	4	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	2	1	..	1	..	1	..	..	..	11	7	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	3	1	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	24
126. Biliary calculi.	(2) Without mention of cholecystitis.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	1	1	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
127. Other diseases of the gall bladder and ducts.	(1) Cholecystitis without record of biliary calculi.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	2	4	..	5	1	4	..	..	..	15	3	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	18
	(2) Other diseases included under 127.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	2	..	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
128. Diseases of the pancreas.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	1
129. Peritonitis without stated cause.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	2	..	1	..	1	..	..	..	..	..	..	..	..	1	2	..	..	1	2	2	11	5	12	6	8	3	4	1	..	..	43	19	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	1	..	..	..	..	..	2	1	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	1	1	..	1	..	..	..	3	2	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	71

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

X. Non-Venereal Diseases of the Genito-Urinary System Annexa.		Nationality.	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Totals
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
130. Acute nephritis.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	
		Chinese	..	..	1	..	1	..	..	..	3	1	1	2	2	..	1	2	1	4	2	3	2	4	3	7	1	2	2	1	..	..	20	26	
		Malays	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	3	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	3	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	1	..	..	..	2	1	56
131. Chronic nephritis.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	1	1	2	..	..	3	3	
		Chinese	..	..	..	..	..	1	..	..	..	..	..	..	1	1	1	..	..	..	1	2	5	15	14	16	47	23	121	66	..	..	190	124	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	1	5	4	..	..	9	5	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	1	..	4	..	..	..	6	3	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	1	..	..	2	2	347
132. Nephritis not stated to be acute or chronic.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	
		Chinese	..	..	..	..	..	..	..	2	..	..	..	..	1	..	..	1	1	..	1	1	4	2	4	5	3	2	7	2	..	..	21	15	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	2	..	..	..	4	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	1	..	..	2	1	46
133. Other diseases of the kidney and annexa.	(a) Pyelitis.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	2	1	4	3	..	..	..	..	..	1	..	..	..	..	..	1	1	..	1	2	1	1	1	2	..	1	1	..	..	..	11	12	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	1	1	..	..	..	..	..	2	2	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	27
	(b) Other diseases included under 133.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
134. Calculi of the urinary passages.	(a) Calculi of kidney and ureter.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	..	..	..	2	1	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
	(b) Calculi of the bladder.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	3	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
	(c) Calculi of unstated site.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	3	..	3	..	..	..	7	1	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2	..	..	..	..	..	3	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

X. Non-Venereal Diseases of the Genito-Urinary System and Annexa—*(contd.)*			Nationality.	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Totals
				M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
136. Diseases of the urethra, urinary abscess, etc.	(a) Stricture of the urethra.		Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	1	..	..	..	3	..	
			Malays ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
	(b) Other diseases of the urethra, etc.		Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	
			Malays ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
137. Diseases of the prostate.			Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	
			Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Malays ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	
			Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
138. Diseases of the male genital organs.			Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese ..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	
			Malays ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
139. Diseases of the female genital organs.	(a) Diseases of the ovary, Fallopian tube and parametrium.	(2) Diseases of the Fallopian tube.	Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	
			Malays ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
		(3) Diseases of the parametrium.	Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	
			Malays ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
	(b) Diseases of the uterus.		Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	2	
			Malays ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	
			Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

XI. Diseases of Pregnancy, Childbirth and the Puerperal State.		Nationality.	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Totals
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
141. Abortion not returned as septic.	(1) Hæmorrhage following abortion.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2	..	..	..	..	..	..	..	3	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
	(2) Without record of hæmorrhage.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
142. Ectopic gestation.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
143. Other accidents of pregnancy.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	1	..	..	..	..	..	..	..	3	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
144. Puerperal hæmorrhage.	(a) Placenta prævia	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	6	..	3	..	1	..	..	..	..	..	11	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11
	(b) Other puerperal hæmorrhage.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	12	..	9	..	1	..	..	..	..	..	23	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	2	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	26
145. Puerperal sepsis.	(a) Puerperal Septicæmia. and pyæmia.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2	..	8	..	..	..	..	..	..	..	..	..	11	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2	..	..	..	..	..	..	..	..	..	3	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16
146. Puerperal albuminuria and convulsions.	(1) Puerperal convulsions.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	3	..	7	..	3	..	1	..	..	..	..	..	18	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	19

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

XI. Diseases of Pregnancy, Childbirth and the Peurperal State—*(contd.)*		Nationality.	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Totals
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
147. Other toxæmias of pregnancy.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2	..	..	..	..	..	..	..	..	..	3	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
149 Other accidents of childbirth.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	1	..	..	..	..	..	..	..	3	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	2	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6
150. Other or unspecified conditions of the puerperal state.	(3) Childbirth (unqualified).	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2	..	2	..	..	..	..	..	..	..	5	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	2	..	2	..	1	..	..	..	..	..	..	..	7	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	2	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14
XII. Diseases of the Skin Cellular Tissue.																																			
151. Carbuncle, Boil.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	1	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	1	1	..	1	2	..	..	6	5	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	1	1	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	1	1	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15
152. Cellulitis, acute abscess.	(1) Cellulitis.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	
		Chinese	4	1	3	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	3	1	..	..	..	..	12	4	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	18
	(2) Acute abscess.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	1	1	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	3	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5
153. Other diseases of the skin and its annexa.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	1	3	2	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	3	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

XIII. Diseases of the Bones and Organs of Locomotion.		Nationality.	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Totals
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
154 Acute infective osteomyelitis and periostitis.		Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	
		Chinese ..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	3	1	
		Malays ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians ..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	1	
		Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7
155. Other diseases of the bones.		Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese ..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	
		Malays ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	1	1	
		Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
156. Diseases of the joints and other organs of locomotion.	(a) Diseases of the joints.	Europeans .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese ..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	2	1	
		Malays .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
XIV. Congenital Malformations.																																					
157. Congenital malformation.	(a) Congenital hydrocephalus.	Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese ..	..	..	1	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	
		Malays ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
	(b) Spina bifida and Meningocele.	Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese ..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	
		Malays ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
	(c) Congenital malformation of heart.	Europeans ..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	
		Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese ..	1	2	1	2	1	2	..	..	1	..	..	2	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	8	
		Malays ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians ..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
		Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15
	(d) Monstrosities.	Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese ..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
		Malays ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

XIV. Congenital Malformations.—(contd.)			Nationality.	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Tota's
				M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
	(e) Other congenital malformations	(3) Imperforate anus.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	
			Malays	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5
		(4) Other stated congenital malformations.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	4	1	..	3	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	5	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9
		(5) Congenital malformation unspecified	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	3	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	1	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
XV. Diseases of Early Infancy.																																				
158. Congenital debility.			Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Eurasians	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	
			Chinese	44	58	3	22	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	47	80	
			Malays	12	13	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	13	14	
			Indians	3	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	2	
			Others	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	163
159. Premature birth.			Europeans	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	
			Eurasians	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	
			Chinese	206	238	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	206	241	
			Malays	19	13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	19	13	
			Indians	20	13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20	13	
			Others	3	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	1	521
160. Injury at birth.	(b) Without mention of Cæsarean section.		Europeans	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	
			Eurasians	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	
			Chinese	24	19	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	25	19	
			Malays	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	
			Indians	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	
			Others	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	52
161. Other diseases peculiar to early infancy.	(a) Atelectasis.		Europeans	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	
			Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Chinese	33	14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	33	14	
			Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
			Indians	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	
			Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	51

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

XV. Diseases of Early Infancy—(contd.)	Nationality.	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Totals
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
(b) Icterus neonatorum.	Europeans	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
	Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Chinese	11	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11	7	
	Malays	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	
	Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20
	Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(c) Other diseases included under 161c. (1) Diseases of the umbilicus.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Chinese	4	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	4	
	Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8
	Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(2) Pemphigus neonatorum.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Chinese	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
	Malays	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
	Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
	Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(3) Other diseases included under 161c.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Chinese	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	
	Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
	Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
XVI. Old Age.																																		
162. Old age. (b) Other forms of senile decay.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	1	1	
	Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	76	134	..	..	76	134	
	Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	45	52	..	..	45	52	
	Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	22	..	..	6	22	
	Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	..	2	1	340
XVII. Deaths from Violence.																																		
163. Suicide by solid or liquid poisons and corrosive substances.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	8	3	10	8	9	2	3	7	2	4	3	..	..	25	35	
	Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	61
	Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

XVII. Deaths from Violence—*(contd.)*	Nationality.	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Totals
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
165. Suicide by hanging or strangulation.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	
	Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	2	3	3	7	3	3	..	2	..	..	..	16	8	
	Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	2	1	2	..	..	..	..	..	..	..	6	1	
	Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	32
166. Suicide by drowning.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
	Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
167. Suicide by firearms.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	
	Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
168. Suicide by cutting or piercing instruments.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	1	..	1	..	..	1	3	
	Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
169. Suicide by jumping from high place.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	
	Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
173. Homicide by firearms.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	
	Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
174. Homicide by cutting or piercing instruments.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	
	Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	2	..	2	..	2	..	..	..	..	..	..	..	7	..	
	Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	
	Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	
	Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10
175. Homicide by other means.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	
	Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

XVII. Deaths from Violence—(*contd.*)		Nationality.	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Totals
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
180. Conflagration.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
181. Accidental burns (conflagration excepted).		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	2	..	1	..	..	..	..	..	1	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	6	..	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	
		Indians	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8
182. Accidental drowning.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	1	..	..	..	1	..	..	..	2	..	1	..	..	..	1	..	1	..	2	..	..	1	..	..	9	1	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	1	..	..	..	..	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	1	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14
186. Accidental injury by fall, crushing, etc.		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	1	..	3	..	..	..	..	..	..	..	..	..	6	1	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	1	..	..	..	..	..	..	1	3	3	9	3	2	..	7	1	23	8	22	1	16	1	8	1	..	..	91	19	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	4	..	2	..	2	..	..	..	2	..	..	..	12	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	9	..	4	..	2	..	..	..	..	..	17	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	1	1	148
193. Electricity (lightning excepted).		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
194. Other and unstated forms of accidental violence.	(1) Inattention at birth.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
	(2) Other causes included under 194.	Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
195. Violent deaths of unstated nature (*i.e.*, accidental, suicidal, etc.)		Europeans	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	3	..	1	1	2	2	5	1	2	..	..	..	..	..	14	5	
		Malays	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	2	..	..	..	..	..	4	..	
		Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	23

MORTALITY ACCORDING TO DISEASE, NATIONALITY, AGE AND SEX FOR THE YEAR 1939.

XVIII. Ill-Defined Diseases.		Nationality.	Under 3 Months		3 to 12 Months		1 to 2 Years		2 to 3 Years		3 to 4 Years		4 to 5 Years		5 to 10 Years		10 to 15 Years		15 to 20 Years		20 to 25 Years		25 to 35 Years		35 to 45 Years		45 to 55 Years		Over 55		Un-known		TOTAL		Grand Totals
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
199. Sudden death.		Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	1	..	8	5	..	..	10	6	
		Malays ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Indians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16
200. Cause of death unstated or ill-defined.	(1) Heart failure.	Europeans ..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	
		Eurasians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese ..	6	5	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	1	3	..	..	1	4	1	7	1	..	..	21	10	
		Malays ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	
		Indians ..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	2	..	1	..	2	1	..	..	6	2	
		Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	42
	(2) Other ill-defined causes.	Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese ..	3	1	5	4	3	10	2	3	..	1	2	1	3	2	1	1	..	2	5	1	1	..	3	..	2	..	3	1	..	..	33	27	
		Malays ..	..	..	..	1	..	2	..	..	..	1	..	..	..	3	1	1	..	1	2	2	2	4	2	1	3	..	2	1	..	..	12	17	
		Indians ..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	
		Others ..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	2	93
	(3) Causes not specified.	Europeans ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Eurasians .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
		Chinese ..	4	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	2	..	2	1	1	..	..	..	..	..	9	3	
		Malays .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	
		Indians ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	
		Others .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14
		Grand Total ..	1209	1011	822	730	326	304	169	140	125	105	38	67	121	111	87	61	81	91	235	154	730	436	873	381	995	308	1095	686	2	1	6958	4586	11544

The following return shows the total number of deaths at different age periods in the different nationalities:—

Mortality According to Nationalities and Ages for the Year 1939.

Nationality	Sex	Under 3 months	3—12 months	1—2 years	2—3 years	3—4 years	4—5 years	5—10 years	10—15 years	15—20 years	20—25 years	25—35 years	35—45 years	45—55 years	Over 55 years	Unknown	TOTAL	
Europeans ..	M	5	2	—	—	1	—	1	—	2	5	12	6	10	8	—	52	66
	F	4	—	—	—	—	—	—	—	1	—	2	2	1	4	—	14	
Eurasians ..	M	4	4	2	1	—	—	—	—	—	—	4	6	8	18	—	47	90
	F	3	5	2	—	—	—	—	1	3	1	3	3	3	19	—	43	
Chinese ..	M	1,011	685	279	143	109	83	102	71	60	183	562	709	863	900	1	5,761	9,537
	F	880	609	254	113	88	57	96	49	64	118	351	317	258	521	1	3,776	
Malays ..	M	122	108	35	19	9	3	10	9	7	20	52	49	36	100	—	579	1,050
	F	88	80	33	14	8	7	9	8	14	18	44	34	27	87	—	471	
Indians ..	M	54	20	9	6	4	2	7	5	12	23	92	96	68	58	1	457	696
	F	33	30	12	13	8	3	4	3	9	15	32	20	11	46	—	239	
Others ..	M	13	3	1	—	2	—	1	2	—	4	8	7	10	11	—	62	105
	F	3	6	3	—	1	—	2	—	—	2	4	5	8	9	—	43	
Total ..	M	1,209	822	326	169	125	88	121	87	81	235	730	873	995	1,095	2	6,958	11,544
	F	1,011	730	304	140	105	67	111	61	91	154	436	381	308	686	1	4,586	
Grand Total ..		2,220	1,552	630	309	230	155	232	148	172	389	1,166	1,254	1,303	1,781	3	11,544	

GENERAL DEATH RATE.

The crude death rate for the year was 19.80 per 1000 living compared with 22.87 in 1938 and 22.46 in 1937.

As has been pointed out already it is possible that our Chinese population may be overestimated for the year under review. If such be the case this would account for at least part of the marked fall of 2.07 per mille in the death rate for the year.

The chief causes of death and rates per 1000 living are set out in the following table, the 1938 figures being given for comparison:—

	1938		1939	
	Cases	Rate per mille	Cases	Rate per mille
Bronchitis and Pneumonias	2,309	4.228	1,805	3.096
Tuberculosis	1,630	2.985	1,733	2.972
Infantile Convulsions (up to 5 years) ..	996	1.824	977	1.676
Beri-Beri	889	1.628	658	1.128
Diarrhoea and Enteritis	780	1.428	721	1.237
Diseases of Early Infancy	719	1.317	820	1.406
Nephritis	455	.833	449	.770
Malaria	357	.654	293	.503
Old Age	341	.624	340	.583
Cancer	316	.579	299	.513
Violence	268	.491	309	.530
Influenza	232	.425	245	.420
Heart Disease (undefined)	228	.415	142	.244
Dysenteries	206	.377	219	.376
Typhoid	202	.370	61	.105
Diphtheria	64	.117	86	.147
Total ..	9,992	18.299	9,157	15,705

It will be seen that there was a decrease of 2.594 per 1,000 living in the chief causes of death in 1939 as against the corresponding figure for 1938.

1939 appears to have been a generally healthy year for Singapore. With the exception of diseases of Early Infancy (particularly premature births), Violence and Diphtheria, there was a decrease in the death rate in the case of all of the chief causes of death as against the corresponding rates for 1938.

The rate for Bronchitis and the Pneumonias in 1939 is the lowest recorded during the past 10 years. There were only 1,805 deaths certified as due to these diseases in 1939 as compared with 2,309 in 1938, 1978 in 1937, and 1990 in 1936 (Census year).

As I have been given to understand that the new chemotherapeutic treatment for pneumococcal pneumonia was fairly extensively used in Singapore during the year, it is of interest to record that the Lobar Pneumonia death rate per mille and the number of deaths certified as due to this disease in 1939 were the lowest recorded during the last ten years. Having due regard to the many factors which may cause variations in the death rate from Lobar Pneumonia, it ~~It~~ will be interesting to watch what the corresponding returns show in the next few years.

The phenomenally low death rate per 1,000 live births for Bronchitis and Pneumonias in infants under 1 year of age also played a large part in the causation of the low combined rate for Bronchitis and the Pneumonias during the year. This was due in large part to an absolute decrease in the number of deaths certified as Broncho-pneumonias in 1939 as compared with many previous years.

The deaths from Bronchitis, the Pneumonias, and Tuberculosis (90% of which were of the respiratory type of Tuberculosis) accounted for 30.6% of all the deaths certified during the year as against 31.5% in 1938. Deaths from Tuberculosis alone were responsible for 15.01% of all the deaths certified as against 13.05% in 1938 and the rate per mille is approximately the same as for last year. In other words, in comparison with the majority of the other chief causes of death, Tuberculosis did not show a proportionate decline. This is only to be expected in view of the grossly overcrowded conditions prevailing in our city.

In the table which follows, successive population enumerations carried out in certain blocks in the congested areas are shown. This table is a replica of the table published in Dr. Hunter's report for 1938, with the figures obtained by a snap census in 1939 added for comparative purposes:—

	Block Boundaries	1933	1936	1938	1939
I.	Queen Street, Arab Street, Johore Road and Ophir Road	779	607	1,210	1,145
II.	North Bridge Road, Sumbawa Road, Minto Road and Jalan Sultan	1,213	1,205	1,444	1,586
III.	Queen Street, Ophir Road, Johore Road and Rochore Road	700	927	1,155	1,159
IV.	Japan Street, Cecil Street, McCallum Street and Stanley Street	771	1,312	1,249	1,403
V.	Cross Street, Cecil Street, Japan Street and Telok Ayer Street	1,712	1,862	1,975	2,216
VI.	Cross Street, Robinson Road, Japan Street and Cecil Street	489	823	882	1,099

It will be observed that there has been an increase in the population in all of the blocks except Block I. In Block I some of the dwellings were converted into shops during the year and these conversions, no doubt, were largely, if not wholly, responsible for the decrease in the number of persons residing in this block when the enumeration was made towards the latter part of the year.

Further evidence of the continued overcrowding in the City is obtained from the Lady Medical Officer's report. Of the 17,966 mothers visited by our Staff Nurses, 14,709 were living in cubicles or single rooms, i.e. 81.9% as against 80.55% last year.

The decrease in Typhoid deaths is welcome. Fortunately, there was no large outbreak of this disease during the year such as occurred in 1938.

The death rate per mille from Beri-Beri was 1.128 as against 1.628 in 1938 and 1.144 in 1937. In spite of all that has been written and said about the advantages of substituting unpolished for polished rice as the staple article of diet in this country, the majority of the population still insist on using the polished variety.

As Professor Rosedale has recently shown (Vol. I. Comptes Rendus Du Xe Congress de la F.E.A.T.M., Hanoi 1938) that the polishing of rice not only removes the vitamins, but also a very large percentage of the valuable mineral salts of calcium and iron etc. as well as a large percentage of the fat and proteins, it goes without saying that a large proportion of our population must suffer seriously from subnutrition as well as from a deficiency of Vitamin B, on account of their not consuming unpolished rice.

It will be seen from the report of the Superintendent of Middleton Hospital, that a Vitamin B preparation is now given as a routine measure to all children admitted with Diphtheria. This has been found necessary, as practically every case of Diphtheria admitted is complicated to some degree by Beri-Beri.

In the table which follows the deaths certified as due to Beri-Beri in infants under 1 year of age, and the rate per 1,000 live births, are shown and also the deaths in persons at all ages and the rate per 1,000 of the population. In the two census years 1931 and 1936, which are included in the table, the rates per 1,000 of the population are printed in heavier type.

BERI-BERI DEATHS 1930—1939.

Year.	Infants under 1 year.		All ages.	
	Deaths.	Rate per 1,000 live births.	Deaths.	Rate per 1,000 living.
1930 ..	2	0.113	818	1.650
1931 ..	8	0.485	651	1.460
1932 ..	15	0.904	509	1.082
1933 ..	7	0.415	434	0.909
1934 ..	23	1.327	538	1.109
1935 ..	57	2.909	642	1.304
1936 ..	139	6.657	767	1.565
1937 ..	132	5.835	595	1.144
1938 ..	360	15.099	889	1.628
1939 ..	238	9.320	658	1.128

The marked increase in the death rate from Beri-Beri in infants under 1 year within the past few years is, I should say, almost certainly due to improved diagnosis rather than to an increase in the incidence or fatality rate of this disease. Only within the past few years have many of the manifestations of a Vitamin B deficiency in infants been recognised.

INFANTILE DEATH RATE.

This was 147.7 per 1,000 live births against 177.4 in 1938.

The infantile morality rate for the year under review was the lowest ever recorded for Singapore.

The number of infant deaths under 1 year was 3,772 or 32.6% of the total deaths as compared with 33.8% in 1938.

The number of deaths under 28 days per 1,000 live births (neo-natal rate) was 50.0.

There were 672 still births compared with 643 in 1938.

INFANTILE MORTALITY BY RACES 1929—1939.

Year	Europeans	Eurasians	Chinese	Malays	Indians	Others	All Races
1929	50.4	134.3	191.4	292.1	169.5	107.0	197.5
1930	40.3	171.9	217.4	290.4	190.9	37.9	219.0
1931	28.7	110.0	204.6	265.6	159.1	104.8	204.3
1932	6.1	67.0	181.6	254.9	109.8	86.9	180.5
1933	33.0	121.6	176.1	246.0	128.5	88.6	176.5
1934	27.2	109.4	176.6	267.6	133.2	88.9	179.3
1935	13.8	80.0	172.4	225.7	136.0	86.9	171.2
1936	26.7	137.4	197.8	219.9	121.0	96.1	191.6
1937	12.2	109.9	172.4	229.9	139.5	72.7	171.9
1938	16.3	58.5	178.9	235.6	128.9	98.9	177.4
1939	39.4	79.6	150.3	188.4	91.6	96.9	147.~~4~~7

It will be seen from the above table that there was a marked decline in the rate for Malays, Indians and Chinese.

The main causes of death and rates per 1,000 live births for each disease are set out in the following table, the 1938 figures and rates being given for comparison:—

	1938 ~~1939~~		1939 ~~1938~~	
	Cases	Rates per mille	Cases	Rates per mille
Convulsions	851	35.693	780	30.544
Bronchitis & Pneumonias	951	39.887	722	28.273
Diseases of Early Infancy	719	30.157	819	32.071
Diarrhoea and Enteritis ..	594	24.914	476	18.640
Tetanus	166	6.962	175	6.853
Beri-Beri	360	15.099	238	9.320
Congenital Syphilis ..	151	6.333	145	5.678
	3,792	159.047	3355	131.379

It may be seen from the preceding table that there was a decrease in the rate in the case of all the main causes of death, except diseases of Early Infancy as compared with the corresponding rates for 1938.

An increase in the number of deaths certified as due to Premature Birth during the year, as compared with 1938, is mainly responsible for the higher death rate for Diseases of Early Infancy for the year under review, as compared with the corresponding figure for 1938.

It may be of interest to record that the infantile death rates from Convulsions, Bronchitis, Pneumonia and Diarrhoea and Enteritis are the lowest recorded in Singapore for the last ten years.

The death rate from Beri-Beri was 9.320 as against 15.099 in 1938, 5.835 in 1937 and 6.657 in 1936.

Judging by the number of deaths certified as due to Measles and Whooping Cough and the number of cases treated in the Middleton Hospital during the year, as compared with previous years, there appears to be no evidence of any decrease in the incidence of these diseases which might possibly account for the marked decrease in the number of infant deaths certified as due to Broncho-pneumonia during the year under review.

In the table which follows some figures obtained in the course of an investigation now being made into the age distribution etc. of Infantile deaths are published for record purposes and for comparison with the corresponding figures which will be published in reports in the future.

Race	Sex	Deaths under 28 days	Live births	Infant deaths under 28 days per 1,000 live births by sex	Infant deaths under 28 days per 1,000 live births by race	Infant deaths 28 days to 1 year per 1,000 live births by race
Europeans	Males	5	142	35.2	32.2	7.2
	Females	4	137	29.2		
Eurasians	Males	3	98	30.6	19.8	59.7
	Females	1	103	9.7		
Chinese	Males	568	10,933	51.9	52.1	98.2
	Females	536	10,259	52.2		
Malays	Males	46	1,105	41.6	39.2	149.2
	Females	37	1,007	36.7		
Indians	Males	33	754	43.7	38.8	52.8
	Females	25	741	33.7		
Others	Males	10	126	79.4	58.2	38.8
	Females	5	132	37.9		
Race Unknown	Males	4	—	—	—	—
	Females	1	—	—		
All Races	Males	669	13,158	50.8	50.0	97.7
	Females	609	12,379	49.2		
England & Wales 1937	Males	—	—	32.79	30.0	28.0
	Females	—	—	26.55		
Sheffield 1937	—	—	—	—	31.0	24.0

X shown for Malays and Indians, the higher rate shown for Chinese females as compared with that

As no figures for previous years are available for comparative purposes, and as many of the samples given in the above table are extremely small, I merely draw attention to the higher rate shown for Chinese during the first month as compared with that X of Chinese males during the first month of life, and the higher mortality for Chinese, Malays and Indians during the latter eleven months of infant life, as compared with that shown for the first month. It will be interesting to see what the corresponding returns show for the next few years. As a point of interest I draw attention to the corresponding rates for England and Wales and Sheffield in 1937 shown in the table above.

Knowing local conditions, the higher mortality rates shown for the latter eleven months of infant life than for the first 28 days (of life) were not unexpected. One point that arises is what influence, if any, the Maternity hospital, hospital, orphanage and other accommodation provided in the city, and immigration may have had on the rates for different races during the first month of life and during the subsequent 11 months.

It is not fully realised, perhaps, to what extent the hospital, Maternity hospital and the orphanage within the Municipal area serve, not only residents within the Municipal area, but also those residing on the rest of the Island, the numerous adjoining islands, and indeed as would appear from many cases, a considerable portion of the mainland.

An analysis of the particulars furnished in the Birth and Death Registration certificates revealed that the favourable influence on our infantile mortality rate, of 880 infants, born and registered in our area, whose parents' usual place of residence was stated to be outside the Municipal area, was more than counter-balanced by the adverse effects on our rate, of 204 infant deaths, registered within our area, all of whom were, in all probability, born outside the Municipal area, e.g. 17 Chinese infants (7 males and 10 females) who died in the Municipal area were stated to have been born in China etc.

Deducting the 880 infant births born of parents whose usual place of residence was stated to be outside our area from the total number (25,537) of births, registered in our area, and deducting the 204 infant deaths, whose births were probably registered outside our area, from our total infant deaths, an infantile mortality rate of 144.~~6~~7 is obtained, which is 3.0~~1~~0 per mille below the recorded rate of 147.7 per mille live births.

The age groups and races of the infants who died within the Municipal Area, whose place of birth and birth registration was probably outside our area, are shown in the table which follows:—

	Under 28 days.	28 days to 1 year.
Europeans ..	0	1
Chinese ..	43	141
Malays ..	1	15
Indians ..	0	3

It is obvious from these figures that the Chinese, Malay and Indian infants over 28 days of age, from outside our area, who died inside our area, to some extent adversely affected the mortality for the latter eleven months of Infant life, and to a less extent, that for the first month. That they did not do so to sufficient extent to account for the higher mortalities, shown for the latter eleven months, as compared with that for the first 28 days of life, is shown in the table which follows:—

	Chinese	Malays	Indians
Deaths registered 28 days to 1 year	2,081	315	79
Deaths registered under 28 days	1,104	83	58
Deaths registered 28 days to 1 year, less those probably born outside ..	(—141) 1,940	(—15) 300	(—3) 76
Deaths registered under 28 days, less those probably born outside	(—43) 1,061	(—1) 82	(—0) 58

Incidentally, the home address and place of birth of 101 infants (Chinese 56 under 28 days, and 44 over 28 days, and one "unknown" race under 28 days) were stated on the Death Registration certificate as "Unknown."

Even if we were to assume that all of these were born inside our area, except the 44 Chinese infants over 28 days of age at death, it is clear from a glance at the table above that they cannot account for the higher mortality in Chinese infants in the latter months of infant life as compared with that of the first month.

With regard to the problem of beri-beri and sub-nutrition in infants and nursing mothers, the question of providing facilities for the sale of unpolished rice at the clinics had to be postponed pending the completion of further investigations, which I was asked to make on the subject.

V. CERTIFICATION OF DEATHS.

The following return shows the number of deaths, the causes of which were certified by Medicalmen, Inspecting Registrars and the Coroner respectively:—

	Europeans	Eurasians	Chinese	Malays	Indians	Others	Total
Medicalmen ..	50	82	7,040	282	432	82	7,968
Registrars ..	0	4	1,933	740	200	17	2,894
Coroner ..	16	4	564	28	64	6	682
Total ..	66	90	9,537	1,050	696	105	11,544

This gives a percentage of 69 certified by medical practitioners, 25 by Registrars and 6 by the Coroner.

It will be seen from the above table that as usual the majority of the Malay deaths were certified by Registrars.

In the table which follows are shown the percentage number of deaths, the causes of which were certified by Medicalmen, Inspecting Registrars and the Coroner respectively for the past 10 years:—

	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
Medicalmen ..	68.2	63.6	63.5	64.5	62.8	65.7	66.9	68.5	71.0	69.0
Registrars ..	28.4	31.6	29.6	29.0	31.1	28.7	27.7	26.0	24.7	25.0
Coroner ..	2.3	4.8	6.8	6.5	6.1	5.6	5.4	5.5	4.3	6.0

There were 25,537 births and 11,544 deaths registered at the Central Births and Deaths Office in the Municipal Building.

VI & VII. ANALYTICAL AND BACTERIOLOGICAL LABORATORIES.

Both reports are appended.

VIII. ANTI-MOSQUITO WORK.

Full details will be found in Dr. Hutchinson's report, which is appended.

New Works.

Work was carried out to deal with newly created dangerous Anopheline mosquito breeding places at Kampong Bintang off Outram Road and at Woodsville in the compound of the new St. Andrew's School. Two ravines in which A. maculatus larvae were found, one at Burn Road, off Macpherson Road, and the other off Thompson Road, near the reservoir, were also dealt with.

These new works involved the laying of 927 yards of subsoil piping, 1612 yards of concrete channels and 303 yards of concrete revetment slabs; 267 yards of main earth ditches were also cut.

Extensions and new works in existing areas involved the laying of 8303 yards of subsoil pipes, 26,820 yards of concrete channels and 11,606 yards of concrete revetment slabs.

Minor repairs in existing areas also involved the laying of 185 yards of subsoil pipes, 1735 yards of concrete channels and 608 yards of concrete revetment slabs.

The total amount spent on all anti-mosquito work, including the maintenance of existing areas, was $176,961.09.

The policy of replacing open ditches in the existing areas by concrete channels, was continued. This work accounted for the unusually large amount of permanent channels laid during the year.

Effective control of the A. sundaicus breeding grounds in the Kallang and Geylang Basins and in the Kim Keat area was maintained throughout the year.

The extensive filling programme embarked on by Government during the year in the Geylang Basin and Kim Keat areas, ~~the~~ has already considerably reduced the amount of maintenance and other control work required in these areas.

During the year 10 permanent maintenance gangs, 5 major works gangs engaged on new works, 3 gangs engaged in A. sundaicus control work in the Kallang, Geylang and Whampoe areas, 2 temporary construction gangs in the Kallang and Whampoe basins engaged in permanent anti-sundaicus work and 2 other patrol gangs engaged in special anti-mosquito and sanitary work, one in the Siglap district and the other in the area immediately surrounding the General Hospital were employed. By the end of the year, it was found possible to dispense with the services of 3 of these gangs, i.e. the 2 temporary gangs employed in the Kallang and Whampoe Basins, and one of the A. sundaicus control gangs which was employed in the Kallang and Whampoe area. Unfortunately, as a result of the war and in view of the uncertainty of conditions it was felt desirable to slow down the work of replacing existing anti-malarial earth ditches by concrete channels in 1940. We also, therefore, dispensed with the services of 2 major works gangs, 10 masons and 30 mason labourers at the end of the year. If, however, conditions become more stable, it is my intention to continue again with such work at the earliest opportunity.

Three mosquito traps were in continuous use nightly throughout the year. The catches are shown in detail in the Deputy Health Officer's report.

18,185 gallons of anti-malarial mixture were sprayed mostly in the Geylang, Kallang and Sungei Whampoe areas.

Towards the end of the year, the Town Cleansing Department completed the filling in of the ponds on the Commissioners' land off Kim Keat Road and thus the dangerous A. sundaicous breeding grounds on this land have now been permanently dealt with.

By the end of the year, negotiations for the purchase by the Commissioners of a strip of low-lying land near the Chinese temple at Kim Keat Road (Lot 372^9) were almost completed. The cost of purchase, plus subsequent filling, will more than offset the cost of the construction and maintenance of a deep anti-malarial drain that would otherwise have had to be constructed to the Sungei Whampoe, through the adjoining filled Government and Improvement Trust land.

Throughout the year, many complaints of mosquito nuisances were investigated and as in previous years proved to be due in the majority of cases to Stegomyia breeding in the complainants' houses or compounds. Many residents in Singapore have little hesitation in making complaints of the prevalence of mosquitoes in their homes, but, in the majority of cases, show great reluctance to do anything whatsoever to help us in dealing with them. For example, they could help us to find out what kind of mosquito is causing the nuisance by catching some and sending them to us when making the complaint. A knowledge of the type of mosquito causing the nuisance would help us to locate or confirm the probable source of the breeding.

For instance, during the year under review, a complaint was received of being inundated with mosquitoes in a certain house. Our Inspector visited the house and requested the complainant to catch a few of the "very numerous mosquitoes" in a test tube, which he handed over. A few days later he called to collect the mosquito catches, but was informed that the complainant had been too busy. He called again some days later, but was handed back his test tube which was empty and informed that the mosquitoes were now "much better."

GUNONG PULAI AND PONTIAN.

Owing to the creation (by jungle clearance for rubber and pineapple plantations, etc.) of dangerous A. maculatus breeding grounds in the floors of some of the ravines on the privately owned lands adjoining the Catchment areas at Gunong Pulai and Pontian, it became necessary to carry out extensive anti-malarial works of a permanent or semi-permanent type on these lands in order to afford protection to the labour forces normally housed in these camps, and also the specially engaged large labour force employed on the catchment area extension scheme which is also housed in these camps.

The nature of the terrain in the ravines, adjoining Gunong Pulai camp is such that control by oiling was impracticable owing to the huge mass of granite boulders scattered throughout the ravine floors. The possibility of control by sluicing, was gone into, but as it was considered that such means of control might deleteriously affect the rubber plantations through which the gush of water would necessarily have to discharge, all ideas of effecting control by such methods had to be abandoned.

With control by oiling being impracticable, and in any case, undesirable, owing to the permanent protection which will always be required for the Water Department employees who will always be housed in this Camp, we had no alternative but to deal with these ravines as best we could by works of a permanent or semi-permanent nature.

At Pontian many of the existing earth ditches were replaced by concrete channels in order to reduce cleansing and maintenance costs. Further work will have to be carried out here to deal with the newly created Anopheline maculatus breeding grounds caused by jungle clearance done by squatters and for the Ayer Hitam road. Further particulars of the anti-malarial works carried out in these areas are given in the Deputy Health Officer's report, which is appended.

The labour forces housed at the permanent camps at Gunong Pulai and Pontian have for many years enjoyed a reasonable degree of protection from malaria by reason of the effective protective anti-malarial works carried out by Dr. Hunter before these permanent camps came into being. Comparatively recently, owing to the rapid opening up of the surrounding country in these areas notorious for A. maculatus breeding, the anti-malarial works previously referred to, needless to say no longer suffice to afford the protection required by the labour forces housed in these camps, and hence the necessity for the new anti-malarial works carried out in these areas during the year.

The effective control of malaria in these camps, in the future, is likely to prove difficult. Each further clearance of jungle that is carried out and each new squatter that starts activities in the neighbourhood of these camps, are bound to add to the difficulties and expense involved in protecting our labour forces from malaria.

Recent experience points to the fact that to control malaria in these camps, it is advisable to control effectively an area around them of approximately a mile radius and possibly even further where A. maculatus is breeding in large numbers outside the one mile protection zone.

IX. SUPERVISION OF MIDWIVES AND INFANT WELFARE.

The report of the Lady Medical Officer is appended.

The District Sisters and Staff Nurses paid a total of 32,206 visits. Of these, 18,071 were first visits representing 17,966 live mothers. 30 mothers had died before a visit could be paid and 75 had removed. 1,479 visits were paid to wrong addresses, of which there were 772. 396 mothers could not be traced. 12,793 revisits were paid to 3,041 sick mothers.

Of the 17,966 mothers visited by the Staff Nurses, 14,709 were reported to be living in single rooms or cubicles.

In all, 26,013 confinements were reported at the Clinics and of these, 7,562 took place in hospitals, 396 were attended by private practitioners, 12,886 by Registered Midwives and 5,159 had no skilled attention at birth.

The total number of maternal deaths associated with Pregnancy, Childbirth and the Puerperal state was 103.

CLINIC & CLINIC DISTRICT VISITING.

26,149 births were reported to the Clinics, including 136 sets of twins. 21,512 of these infants were subsequently taken on the Clinic Registers. 17,422 were seen within ten days of birth, 287 were still born, 244 had died before a visit could be paid, and 594 had either been removed, were being nursed out or were sick in hospital. 7,602 were born in hospitals.

In the Clinics, 51,640 consultations were held and 125,069 visits were paid in the homes by the District Nurses. 1,547 patients were sent to hospital, 559 as in-patients and 988 as out-patients.

Owing to the great difficulty experienced in coping with the large number of visits which have to be paid in the homes, the Commissioners were asked to agree to the appointment of three extra Health Visitors next year. The appointment of these extra Health Visitors was approved of and we hope to make the appointments early next year.

The Commissioners also approved of the appointment of a Junior Assistant Lady Medical Officer in 1940 as our present medical staff is unable to handle the increasing amount of work, especially ante-natal work and Diphtheria Immunisation which is now being carried out by the Infant Welfare Department.

MUNICIPAL MIDWIVES.

They attended 1,847 cases including 651 confinements, 4 miscarriages and 1,192 post-natal cases where it was found that there had been no skilled attention at birth and no registered midwife in attendance. 7 cases with complications were sent to hospital.

Panel doctors were called to attend 61 confinements, with complications, who were too poor to engage the services of a medical man.

The total number of visits paid by the four Municipal Midwives was 8,137.

ANTE-NATAL WORK.

This work was continued throughout the year. As in the previous year our efforts were directed mainly against Congenital Syphilis and Beri-Beri.

1,057 pregnant mothers took advantage of the ante natal services offered at the Clinics as against 801 in 1938 when this work was first started.

On these mothers, 4,614 consultations were held as against 2,760 in 1938 and 3,529 visits were paid in the homes as compared with 1,799 in the previous year. 104 of the mothers were sent to hospital for treatment—60 as in-patients and 44 as out-patients.

As in previous years both in the homes and at all Clinic sessions great emphasis has been laid on the importance of breast feeding and proper diets. Unfortunately, as regards the latter, however, willing and anxious some of the mothers may be to follow our advice and consume unpolished rice instead of the polished variety, they are more often than not unable to do so as they cannot purchase it within reasonable distance of their homes and cannot afford to pay bus fares to the very few shops in the centre of the town where unpolished rice is sold.

IMMUNISATION AGAINST DIPHTHERIA.

A Diphtheria Immunisation campaign commenced in March. In a few districts in the city, in the case of infants who had reached one year of age, the mothers were advised to have them immunised against Diphtheria. The number of mothers who accepted our advice far exceeded our expectations. Though the intention was to confine our efforts in the immunisation campaign to infants just over one year of age, many mothers brought older children, and we invariably, except in the case of children over 3 years of age, complied with the requests to immunise them also.

Two inoculations of Alum Precipitated Toxoid were used, the first dose of 0.2 c.c. being followed in 4—6 weeks' time by a second dose of 0.5 c.c.

3916 ~~3,629~~ first inoculations (535 in December) and 3552 ~~2,664~~ second inoculations were given. The percentage of children brought forward for the second inoculation has been most gratifying indeed. Only 3 mild reactions were observed.

Special cards have been issued for each child who has been immunised, and the mothers have been advised to bring these cards with them to their medical practitioners, if at any time in the future, the child becomes ill, especially so with a throat complaint.

Had it not been for the fact that we were obliged, by reason of limitation of staff, to confine our campaign to a few districts in the town, I feel confident that we could have immunised voluntarily a much larger proportion of our infant population.

Further particulars of this immunisation campaign against Diphtheria are to be found in the appended Infant Welfare Department report.

X. FOOD AND MARKETS.

The report of the Food and Market Inspector is appended.

Wet fish sales were 6.0% below last year's figures.

In the markets approximately 58 tons of unsound foodstuffs were seized or surrendered. A further 150 tons from shops and stores in the town were similarly dealt with, and all were sent to the Incinerator for destruction or otherwise properly disposed of.

FOOD SHOPS, ETC.

Licences were issued for:—

	1938	1939
Eating Houses	1,041	1,087
Coffee Shops	172	163
Soda Fountains	44	76
Meat and Fish Shops	160	153
Bakeries	22	25
Cake Shops	36	34
Biscuit Factories	5	5
Aerated Water Factories	8	8
Dairy Shops	2	4
Milk Vendors	215	156
Iced Water and Cold Drinks	109	96
Food Caterers	2	1
Food Shops	11	17

All were regularly inspected by the District Sanitary Inspectors.

XI. PLACES OF PUBLIC RESORT.

Theatres, Hotels, Public Houses, Schools, Dental establishments, etc., were regularly inspected and the necessary reports submitted at the request of the several licensing authorities.

XII. SLAUGHTER HOUSES.

During the year, 328,400 animals were slaughtered in the Municipal Abattoirs. These were distributed as follows, the 1938 figures being given for comparison:—

	1939	1938
Pigs	276,032	268,719
Sheep	32,334	35,246
Goats	6,443	3,688
Oxen	13,505	13,866
Buffaloes	86	77
	328,400	321,596

733 carcases were totally condemned, 653 being pigs, 29 oxen, 27 sheep, 23 goats and 1 buffalo. Of the pigs, 355 were suffering from Cystercercus Cellulosae, 160 from Pyrexia, 31 from Jaundice, 26 from swine fever and 7 from generalised tuberculosis. Of the oxen, 11 were

suffering from Cystercercus Bovis, 8 from pathological emaciation, 6 from Jaundice and 1 from tuberculosis.

There was evidence of tuberculosis in the carcases of 735 pigs and 5 oxen.

Carcases and organs amounting to 164 tons 3 cwts. were destroyed at the Municipal Incinerator.

XIII. OFFENSIVE TRADES.

443 licences, 342 of them for laundries were issued during the year, the fees collected being $4,006.45. All these licensed premises were subject to the usual routine inspection.

XIV. BURIAL GROUNDS.

There were 10,076 burials inside Municipal limits during the year, the nationalities being as follows:—

Europeans	102
Eurasians	105
Chinese	7,553
Malays	1,083
Indians	1,165
Others	68
	10,076

There were 57 exhumations during the year, carried out under the supervision of the Burial Ground Inspector. The same officer paid 1,321 visits of inspection to Municipal and other cemeteries.

There were 121 cremations.

Of the total burials above, 8,714 took place in the 6 Municipal Cemeteries and the rest in the 14 Private and 17 Public Cemeteries still in use.

XV. STAFF.

Dr. Hunter, C.B.E., who had been in the Municipal service for approximately 26 years and was Municipal Health Officer for nearly 16 years, sailed on leave prior to retirement in March.

The writer was appointed to succeed Dr. Hunter and Dr. W. E. Hutchinson was promoted to the post of Deputy Health Officer.

Dr. R. C. Oehlers was appointed Assistant Health Officer on February 1st and Dr. C. H. Yeoh on March 1st.

Dr. Gilmour, Bacteriologist, returned from leave in July.

Mr. Wilson, Abattoir Superintendent, went on long leave in April and returned to duty in December.

Mr. M. G. Byrne, who went home on special study leave in August, returned to duty in October. Owing to the outbreak of War the special Meat Inspection Course, which he was to have attended, was cancelled.

Probationary Sanitary Inspector J. Ferguson was successful in obtaining the diploma of the Royal Sanitary Institute.

HEALTH OF SUBORDINATE STAFF.

The number of cases treated in the Dispensary was 38,749. There were 595 cases sent to hospital and 264 to various clinics. 443 were treated by private practitioners. 102,721 days sick leave were granted, 51,272 dressings were applied and the daily attendances at the dispensary totalled 91,754.

661 examinations for physical fitness were carried out.

The chief causes of invaliding were Influenza (13,886), Accidents and Injuries (6,900), Pyrexias (3,238), Myalgias and Neuralgias (2,251), Bronchitis (2,647), Inflammation and Abscesses (1,244), and Septic Wounds and Ulcers (1,363).

There were only 107 first attacks of malaria.

XVI. GENERAL.

There were 2,732 notices including 408 intimations served during the year. 1,151 notices were brought forward from the previous year, making a total of 3,883. Of these, 3,296 were complied with, 94 were cancelled and 493 carried forward.

There were 57,114 visits of Inspection paid by the Sanitary Inspectors, 1,815 prosecutions, 1,669 convictions with fines imposed amounting to $7,917.50 while 74 prosecutions were withdrawn and 72 summonses could not be served.

The following reports and returns are appended:—

Anti-Mosquito Report.
Report of the Analyst.
Report of the Bacteriologist.
Report of the Infant Welfare Department.
Report of the Superintendent Middleton Hospital.
Report of the Market Inspector.
Report of the Superintendent Abattoirs.
Chief Sanitary Inspector's returns.

I conclude by recording my grateful thanks to all members of the department, both Senior and Subordinate, for their continued loyal support.

I have the honour to be,

Sir,

Your obedient servant,

N. A. CANTON, M.B., CH.B., B.A.O., D.P.H.,

Municipal Health Officer.

MUNICIPAL HEALTH OFFICE,
Singapore, 20th February, 1940.

The Municipal Health Officer,
Singapore.

Sir,

I have the honour to submit the following report on the work of the Anti-mosquito Department during the year 1939.

NEW ANTI-MALARIAL WORKS.

The policy of consolidating work in existing anti-malarial areas was continued and work was carried out as necessary in five new areas as follows:—

Area No. 162—Kampong Bintang.
„ „ 163—Thompson Road Ravine No. 6.
„ „ 164—Woodsville.
„ „ 165—Burn Road Ravine.
„ „ 166—Craig Road Railway.

AREA NO. 162—KAMPONG BINTANG.

This area is situated off Outram Road, extending from the north western slopes of the hill at Outram Road, on which is situated the Chinese Commercial School, to Peng Siang Quay. A. maculatus larvae were collected from seepages along the toe of the hill. Close by, on the property of Messrs. Ho Hong Oil Mills (1931), Ltd. was an extensive pond from which A. sundaicus larvae had been collected and into which these seepages drained. The owners of the pond agreed to fill it with earth. When the filling was completed all seepages were trapped by subsoil pipes, which were led to discharge into an existing concrete drain on the property.

241 feet of six-inch subsoil pipes were laid.

AREA NO. 163—THOMPSON ROAD RAVINE NO. 6.

This ravine is situated near Thompson Road between Lornie Road and the Municipal Reservoir, running down to Reservoir Road.

A. maculatus larvae were found in seepages.

The existing earth ditch was straightened and replaced by an open invert concrete channel. Outcropping seepages were dealt with by subsoil piping.

1,246 feet of fifteen-inch, 160 feet of twelve-inch concrete inverts, 120 eighteen-inch, 1728 fifteen-inch revetment slabs, and 1322 feet of six-inch subsoil pipes were laid.

It was found necessary to fell 20 rubber trees and 5 cocoanut trees.

AREA NO. 164—WOODSVILLE.

This area is within the compound of the new St. Andrew's School at Serangoon Road.

Anopheline larvae were collected from seepages along the toe of the slope on the south side of the playing fields.

An open invert concrete channel was laid along the toe of the slope and led to discharge into the Kallang River. Seepages were trapped by subsoil piping.

1,840 feet of twelve inch concrete inverts, 20 fifteen inch revetment slabs, 255 feet of six inch and 512 feet of four inch subsoil pipes were laid.

AREA NO. 165—BURN ROAD RAVINE.

This ravine is situated at Burn Road, off McPherson Road, and runs from the rising ground near Kampong Ampat down to Burn Road.

A. maculatus larvae in considerable numbers were collected from seepages in the swampy floor of the ravine.

An earth ditch was cut throughout the length of the valley floor for a distance of eight hundred feet. The area was then left to dry out.

AREA NO. 166—CRAIG ROAD RAILWAY.

This area extends along the former Federated Malay States Railway permanent way from Cantonment Road to New Bridge Road.

The existing earth drains were replaced by open invert concrete channels.

130 feet of eighteen-inch, 960 feet of twelve-inch concrete inverts and 130 eighteen-inch revetment slabs were laid.

AREA NO. 160—KAMPONG MARTIN.

The work in this area was carried out in 1938 and is referred to in the Deputy Health Officer's report on the Anti-Mosquito Department for that year. By an oversight the detail of the work was omitted from the printed copy of the report, and is as follows:—

This ravine runs down on the south west side of Institution Hill to the tidal creeks at Kampong Martin. Following the removal of squatters' huts in the vicinity, and the consequent absence of sullage water from the numerous existing earth drains, many potential breeding places for dangerous anopheline mosquitoes developed.

The stream bed in the valley floor was deepened and straightened, and an open invert concrete channel constructed. The storm water from a road reserve at the extreme head of the ravine was taken to this new drain through a new twelve-inch culvert, 10 feet long, laid under the reserve road. All seepages were trapped by subsoil piping.

500 feet of fifteen-inch concrete inverts, 356 eighteen-inch revetment slabs, and 100 feet of six-inch subsoil pipes were laid.

EXTENSIONS AND NEW WORKS IN EXISTING AREAS.

AREA NO. 4, CLAYMORE.

Earth ditches were replaced by open invert concrete channels.

280 feet of twelve-inch concrete inverts were laid.

AREA NO. 8, KING'S ROAD—TYERSALL.

New outcropping seepages were dealt with by laying 341 feet of six inch subsoil pipes.

AREA NO. 9, NASSIM AND DALVEY.

An earth ditch, taking sullage water, was replaced by an open invert concrete channel.

156 feet of nine-inch concrete inverts were laid.

AREA NO. 12, SCOTTS ROAD RAILWAY.

The anti-malarial earth ditches were replaced by open invert concrete channels. A spring, feeding a well, was subsoil-piped. The well was closed.

24 feet of fifteen-inch, 2020 feet of twelve-inch concrete inverts, 100 eighteen-inch revetment slabs, and 100 six-inch subsoil pipes were laid.

AREA NO. 14, WATTEN ESTATE.

The earth outlet drain, from the end of the existing anti-malarial channel to Dunearn Road roadside drain, was replaced by an open invert concrete channel.

888 feet of twenty-one inch concrete inverts and 884 eighteen-inch revetment slabs were laid.

AREA NO. 16, TYERSALL PONDS.

The anti-malarial concrete channel laid seventeen years ago had become very badly eroded and it was thought desirable to relay the drain.

642 feet of fifteen-inch concrete inverts, 588 revetment slabs and 130 six-inch subsoil pipes were laid.

AREA NO. 22, JERVOIS ROAD NO. 3.

Irritative mosquitoes were found breeding in considerable numbers in earth ditches in the low area immediately south of Jervois Road. Certain of these earth ditches were replaced by open invert concrete channels, and unnecessary ditches were filled in. Seepages were trapped by subsoil piping.

166 feet of twenty-one inch, 40 feet of fifteen-inch, 1,420 feet of twelve-inch, 192 feet of nine-inch concrete inverts, 260 eighteen-inch revetment slabs and 580 six-inch subsoil pipes were laid.

AREA NO 23, KEITH'S SWAMP.

New outcropping seepages in the floor of this ravine were dealt with by laying 3 six-inch and 200 four-inch subsoil pipes.

AREA NO. 35, TIONG BAHRU.

The work, referred to in the report of the Anti-Mosquito Department for 1938, of dealing more effectively with the breeding places of irritative mosquitoes was completed during the year. The remaining sullage drains were replaced by open invert concrete channels and the area in general was cleared up These drains have now been handed over to the care of the Town Cleansing Department, which has undertaken the necessary sweeping and cleaning of them.

74 feet of eighteen-inch, 364 feet of fifteen-inch, 1,678 feet of twelve-inch, 928 feet of nine-inch concrete inverts, 396 eighteen-inch revetment slabs, 485 six-inch and 65 four-inch subsoil pipes were laid.

Towards the end of the year, work was commenced on replacing the large anti-malarial ditch at the back of the General Hospital by an open invert concrete channel.

200 feet of twenty-one inch, 106 feet of eighteen-inch, 190 feet of twelve-inch, 224 feet of nine-inch concrete inverts, 315 eighteen-inch revetment slabs, 36 six-inch and 37 four-inch subsoil pipes were laid.

Work is in progress.

AREA NO. 56, HENDERSON ROAD RAVINE.

The anti-malarial earth ditch was replaced by an open invert concrete channel.

72 feet of twenty-one inch, 1,970 feet of eighteen-inch concretee inverts, 1,714 eighteen-inch revetment slabs, and 940 six-inch subsoil pipes were laid.

AREA NO. 58, KAMPANG JAVA.

Certain necessary earth ditches were re-aligned and replaced by open invert concrete channels. Other earth ditches were filled in and the few remaining will be filled in at an early date.

1,822 feet of twelve-inch concrete inverts were laid.

AREA NO. 59, MOULMEIN ROAD.

A. maculatus larvae were collected from seepages caused by a new hill cutting. The seepages wert dealt with by laying 220 six-inch subsoil pipes.

AREA NO. 63, SWISS COTTAGE NO. 1.

The anti-malarial earth ditches, in the low area between Malcolm Road and Dunearn Road, were replaced by open invert concrete channels. Seepages were trapped.

1,200 feet of twelve inch concrete inverts and 920 six inch subsoil pipes were laid.

AREA NO. 67, SPOTTISWOODE PARK.

A. maculatus larvae were found in seepages outcropping over the solid concrete drain surrounding the football ground of the Junior Service Club. The solid concrete drain was replaced by an open invert concrete channel, and the seepages were subsoil-piped. Certain earth drains around the Oil Tanks, and along the former Federated Malay States Railway permanent way were also replaced by open invert concrete channels.

3,282 feet of twelve-inch, 524 feet of nine-inch concrete inverts, 131 eighteen-inch revetment slabs and 1,686 feet of six-inch subsoil pipes were laid.

AREA NO. 68, PEARL'S HILL.

Dangerous outcropping seepages at the toe of Pearl's Hill within the compound of the Sikh Police Barracks were dealt with.

174 feet of twelve-inch concrete inverts, 108 eighteen-inch revetment slabs and 620 six-inch subsoil pipes were laid.

AREA NO. 79, SERANGOON VILLAGE.

This area is bounded by Upper Serangoon Road, Kampong Sireh, the line of Municipal Limits and Paya Lebar Road. It was taken over from the Rural Board many years ago when Municipal Limits were extended at Upper Serangoon.

Very little anti-malarial work had been carried out, only a few subsoil pipes having been laid.

The main stream, winding through the valley, takes nearly all the sullage and storm water from Upper Serangoon Village. It was in places some fifteen feet wide and large sections of the banks were very badly scoured out.

Many seepages were found in the Sireh Gardens from which A. maculatus larvae were collected.

Notices under the Destruction of Mosquitoes Ordinance were served and the full co-operation of the owners of the land, affected by the necessary works, was obtained.

Many trees had to be felled and, as some of these were very close to squatters' dwellings, the actual work of felling was carried out by the skilled tree-felling gang of the Municipal Engineer's Department. Assistance was also given by the Municipal Engineer in having levels taken, and in pegging out a line of drainage.

Towards the end of the year, work was commenced in laying an open invert concrete channel from the edge of Municipal Limits to Paya Lebar Road. This channel runs partly in the bed of the stream but new cutting was found necessary to straighten the line of drain. Work is in progress.

200 feet of twenty-one inch, 320 feet of eighteen-inch, 38 feet of fifteen-inch, 190 feet of twelve-inch, 44 feet of nine-inch concrete inverts, and 550 eighteen-inch revetment slabs have been laid.

Work is in progress.

AREA NO. 80, ECONOMIC GARDENS.

The anti-malarial earth ditches through the grounds of Raffles College were replaced by open invert concrete channels and seepages were trapped.

1,442 feet of twelve inch concrete inverts, 6 eighteen-inch revetment slabs and 1,121 six-inch subsoil pipes were laid.

AREA NO. 81, MOUNT ROSIE.

An earth ditch, in a reserve road off Whitley Road, was replaced by an open invert concrete channel.

300 feet of twelve-inch concrete inverts were laid.

AREA NO, 89, KAMPONG BAHRU.

Earth drains, taking sullage water from squatters huts in the vicinity of the General Hospital, were replaced by open invert concrete channels.

554 feet of nine-inch concrete inverts were laid.

AREA NO. 90, OUTRAM ROAD (ICE FACTORY RAVINE).

Removal of earth from the toe of the hill-cutting damaged the existing subsoil pipe line, and created fresh seepages. The pipe line was repaired, and the seepages dealt with.

186 feet of twelve-inch concrete inverts and 66 feet of six-inch subsoil pipes were laid.

AREA NO. 91, HOLLAND—BUKIT TIMAH ROAD.

The permanent anti-malarial work, referred to in the report of the Anti-Mosquito Department for 1938, was completed about June.

All anti-malarial earth ditches were replaced by open invert concrete channels, and permanent seepages were subsoil-piped.

2,826 feet of twelve-inch, 16 feet of nine-inch concrete inverts, 438 feet of six-inch and 262 feet of four-inch subsoil pipes were laid.

AREA NO. 94, BUSHY PARK.

Dangerous seepages from the toe of the slope near the Labour Department Coolie lines were dealt with by laying 256 feet of six inch subsoil pipes.

AREA NO. 96, WESTERN RECLAMATION.

The anti-malarial earth ditches between Raeburn Park and Kampong Bahru Road were replaced by open invert concrete channels. Many of the small earth drains cut to dry out seepages were subsoil-piped.

380 feet of fifteen-inch, 320 feet of twelve-inch, 158 feet of nine-inch concrete inverts and 1,424 feet of six-inch subsoil pipes were laid.

AREA NO. 105, BUKIT PERMEI.

Outcropping seepages near the Federated Malay States Railway bridge at Kampong Bahru Road and certain earth drains were subsoil-piped. A new open invert concrete channel was laid to take sullage water from the existing kampong.

590 feet of twelve-inch concrete inverts, 9 eighteen-inch revetment slabs, 292 feet of eight-inch and 306 feet of six-inch subsoil pipes were laid.

AREA NO. 106, JALAN BESAR.

The anti-malarial earth ditches between Serangoon Road and Jalan Besar were replaced by open invert concrete channels.

2,600 feet of twelve-inch concrete inverts were laid.

AREA NO. 117, TELOK BLANGAH RAVINE.

Outcropping seepages in this ravine were dealt with by laying 300 feet of six-inch and 200 feet of four-inch subsoil pipes.

AREA NO. 122, ALEXANDRA ROAD, 4th MILE RAVINE.

The main anti-malarial earth ditch in this ravine was replaced by an open invert concrete channel. The work was carried out by the Municipal Engineer's Department.

1,088 feet of twenty-one inch concrete inverts and 1,080 eighteen-inch revetment slabs were laid.

AREA NO. 129, SUNGEI NAMLY.

A. maculatus larvae were collected in considerable numbers in two of the three subsidiary Ravines in this area:

Subsidiary Ravine No. 1.

This ravine runs down from the ridge behind King's Road to Coronation Road, just past the Nanyang Girls' High School.

There were several seepages in which A. maculatus larvae were found. The existing concrete channel which had been laid some years ago by the owner of the property was unsatisfactory, and was not deep enough to enable the seepages to be trapped satisfactorily. The existing inverts were taken up, the drain was deepened, and replaced by an open invert concrete channel, discharging into the Sungei Namly. The seepages were then dealt with by subsoil piping.

616 feet of fifteen inch, 300 feet of twelve inch concrete inverts, 11 eighteen-inch, 978 fifteen-inch revetment slabs and 1106 six-inch subsoil pipes were laid.

It was found necessary to remove 11 cocoanut trees and to close one well.

Subsidiary Ravine No. 2.

This ravine runs down from the ridge at King's Road to Coronation Road, near the Johore water pipe line.

The main earth ditch was replaced throughout its length by an open invert concrete channel, discharging into the Sungei Namly. A twenty-four inch culvert, 12 feet long, was laid under Coronation Road. Seepages were trapped by laying subsoil pipes.

1,156 feet of twentyone-inch 678 feet of eighteen-inch, 190 feet of twelve-inch concrete inverts, 1,829 eighteen-inch revetment slabs, and 1,000 feet of six-inch subsoil pipes were laid.

170 rubber trees and 8 betel nut trees were removed.

AREA NO. 130, MOUNT WASHINGTON RAVINE.

Work was commenced on replacing the central section of the main anti-malarial drain by an open invert concrete channel, the upper length of the drain from "Mount Washington" to the Federated Malay States Railway line, and the lower length where it runs through the Sewage Disposal Works, having been channelled in former years.

Other subsidiary earth ditches were also channelled.

2,236 feet of twenty-one inch, 852 feet of eighteen-inch, 1,518 feet of twelve-inch, 1,340 feet of nine-inch concrete inverts, 2,340 eighteen-inch, 1,145 fifteen-inch revetment slabs, 132 feet of eight-inch and 1,550 feet of six-inch subsoil pipes were laid.

Work is in progress.

AREA NO. 133, KALLANG BASIN.

The work, referred to in the report of the Anti-Mosquito Department for 1938, of eliminating as far as possible A. sundaicus breeding places was completed in November. The permanent earth ditches leading to the tide gates, and other necessary earth drains, were replaced by open invert concrete channels.

Within the Basin proper, 1,710 feet of fifteen-inch, 6,770 feet of twelve-inch, 1932 feet of nine-inch concrete inverts, 386 eighteen-inch revetment slabs and 335 feet of six-inch subsoil pipes were laid.

High tides and heavy rain storms during December put a heavy strain on the bund with the result that it was breached in four places. Gunny sacks were filled with earth and then laid in the scoured out base of the bund, which was built up again. The bund was raised one foot throughout its length.

Within the Bendemeer section of the Basin, 1,116 feet of fifteen-inch, 5,164 feet of twelve-inch, 144 feet of nine-inch concrete inverts, 632 eighteen-inch revetment slabs and 2,380 feet of six-inch subsoil pipes were laid. The bund in this section was also raised one foot throughout its length.

AREA NO. 135, KIM KEAT RAVINE.

The work of replacing the main anti-malarial earth ditch, and other necessary earth drains, by open invert concrete channels was commenced.

1,122 feet of twenty-one inch, 456 feet of eighteen inch, 1,816 feet of fifteen-inch concrete inverts and 2,220 eighteen-inch revetment slabs were laid.

Work is in progress.

AREA NO. 136 BOON TECK RAVINE.

The anti-malarial work, referred to in the report of the Anti-Mosquito Department for 1938, was completed during the year.

6 feet of eighteen-inch, 520 feet of fifteen-inch, 3,770 feet of twelve-inch, 4 feet of nine-inch concrete inverts, 183 eighteen-inch revetment slabs, 442 feet of eight-inch and 2,677 feet of six-inch subsoil pipes were laid.

AREA NO. 138, TAI GIN RAVINE.

The main anti-malarial earth ditch in this ravine was replaced by an open invert concrete channel.

Permanent seepages were trapped by laying subsoil pipes.

1,192 feet of twenty-one inch 2,300 feet of eighteen-inch, 4,504 feet of twelve-inch concrete inverts, 3,294 eighteen-inch revetment slabs, 27 feet of eight-inch and 465 feet of six-inch subsoil pipes were laid.

AREA NO. 139, AH HOOD RAVINE.

Permanent anti-malarial work was commenced in this ravine towards the end of the year.

The existing anti-malarial earth ditch from the Sungei Whampoe to the end of Ah Hood Road was deepened and regraded throughout its length, and replaced by an open invert concrete channel.

3,848 feet of twenty-one inch concrete inverts and 2,213 revetment slabs were laid.

Work is in progress.

AREA NO. 154, THOMSON ROAD RAVINE NO. 4.

The anti-malarial work, referred to in the report of the Anti-Mosquito Department for 1938, was completed.

244 feet of twenty-one inch, 200 feet of eighteen-inch concrete inverts and 256 eighteen-inch revetment slabs were laid.

AREA NO. 157, ALKAFF AVENUE.

Work was commenced in November to eradicate the extensive breeding places of mosquitoes between the old Speedway ground, Upper Aljunied Road, and McPherson Road. An earth ditch was cut from McPherson Road along the boundary of the Speedway ground, and then continued, at right angles, almost as far as Upper Aljunied Road. At the end of the year the subsoil water had dropped considerably, and the swamp is slowly drying out. The total length of earth drain cut was 973 yards.

AREA NO. 158, JALAN DATOH RAVINE.

The anti-malarial work, referred to in the report of the Anti-Mosquito Department for 1938, was completed.

454 feet of twenty-one inch, 546 feet of twelve-inch, 100 feet of nine-inch concrete inverts, 489 eighteen-inch revetment slabs and 560 feet of six-inch subsoil pipes were laid.

AREA NO. 159, KAMPONG SAMBAU.

The anti-mosquito work, referred to in the report of the Anti-Mosquito Department for 1938, was completed.

754 feet of twelve-inch concrete inverts were laid.

REPAIRS AND MINOR EXTENSIONS.

During the year minor extensions and repairs were required in 70 of the existing anti-malarial areas. The main items were as follows:—

Area No. 15, Woodleigh Ravine.

100 feet of eighteen-inch inverts, 50 eighteen-inch and 12 fifteen inch revetment slabs were relaid.

Area No. 32, Radin Mas.

80 feet of twenty-one inch concrete inverts and 25 eighteen-inch revetment slabs were relaid.

Area No. 81, Mount Rosie.

10 feet of twenty-one inch, 111 feet of eighteen-inch, 20 feet of fifteen-inch concrete inverts and 41 eighteen-inch revetment slabs were relaid. 150 feet of twelve-inch, 204 feet of nine-inch concrete inverts, 400 feet of six-inch and 20 feet of four-inch subsoil pipes were laid as extensions to existing works.

Area No. 100, Adam Park.

6 feet of twenty-one inch, 420 feet of eighteen-inch, 60 feet of fifteen-inch, 10 feet of twelve-inch and 14 feet of nine-inch concrete inverts, and 106 eighteen-inch revetment slabs were relaid. 100 feet of eight-inch and 150 feet of six-inch subsoil pipes were laid as an extension to existing works.

Area No. 107, Wayang Satu.

1,080 feet of eighteen-inch, 20 feet of fifteen-inch, 10 feet of twelve-inch concrete inverts and 105 eighteen-inch revetment slabs were relaid. 420 feet of four-inch subsoil pipes were laid as an extension to existing works.

Area No. 109, Mount Pleasant Ravine.

120 feet of twenty-one inch, 110 feet of eighteen-inch, 20 feet of twelve-inch concrete inverts, 47 eighteen-inch and 20 fifteen-inch revetment slabs were relaid. 20 feet of four-inch subsoil pipes were laid as an extension to existing works.

Area No. 110, McRitchie Ravine.

30 feet of twenty-one inch, 48 feet of eighteen-inch concrete inverts and 20 eighteen-inch revetment slabs were relaid. 567 feet of six-inch and 197 feet of four-inch subsoil pipes were laid as an extension to existing works.

Smaller items of repair work called for the use of the following:— 186 feet of twenty-one inch, 272 feet of eighteen-inch, 98 feet of fifteen-inch, 598 feet of twelve-inch, 78 feet of nine-inch concrete inverts, 159 eighteen-inch, 51 fifteen-inch revetment slabs, 2 feet of eight-inch and 3 feet of six-inch subsoil pipes.

OILING.

As the permanent measures in the Kallang and Geylang Basins, in the Sungei Whampoe areas, and in areas around the hospitals were completed, it was possible to reduce the amount of oiling required. Oiling the potential breeding places of dangerous Anopheline mosquitoes in other areas was continued as usual.

18,185 gallons of anti-malarial mixture were used as compared with 39,298 gallons in 1938 and 55,970 gallons in 1937.

MAINTENANCE.

Routine maintenance, consisting of clearing and grass cutting, was carried out in all anti-malarial areas.

MOSQUITO SURVEYS.

Systematic surveys of the Municipal area were regularly carried out and 5,190 collections of mosquito larvae were examined and identfied in the laboratory.

Collections of adult mosquitoes were made during the year by means of mosquito traps. Only 78 female Anopheline mosquitoes were caught as compared with 192 female Anophelines during 1938. All of these were dissected and none was found infected.

In addition 12,389 adult mosquitoes were identified.

The following table shows the numbers and various species of female Anopheline mosquitoes trapped:—

PLACE OF TRAPPING.	Number of nights the traps were set.	SPECIES					
		Sundaicus	Vagus	Kochi	Sinensis	Tesselatus	Maculatus
Tan Tock Seng Hospital ..	306	—	24	7	3	—	—
Katong Sea Front ..	306	2	6	1	2	—	—
Kallang Basin ..	141	—	2	—	—	1	—
Lorong 6, Geylang ..	24	—	3	—	—	—	—
Alexandra Road ..	35	—	3	1	—	—	—
Serangoon Road 5th mile ..	64	7	3	4	8	—	1
Boscombe Road ..	35	—	—	—	—	—	—

The trap at Kallang Basin was removed as trapping for dangerous mosquitoes continued to prove negative. It was moved to other sites and with results as shown in the table above.

It was considered that owing to developments still taking place in the respective districts, that it would be safer to retain the traps at Tan Tock Seng Hospital and at Katong Sea Front. As regards the latter trap only 2 A. sundaicus mosquitoes were caught as compared with 8 in 1938.

FILLING.

The filling by 'controlled tipping' of the 13 acres of ponds bought by the Municipal Commissioners at Kim Keat Road was completed during the year, thus eradicating finally these breeding places of dangerous Anopheline mosquitoes. Filling, by this method, was commenced on Municipal Lands at Aljunied Road and Kolam Ayer Lane. Crown Land in Balestier Plain was being filled by Government and though filling operations were slowed down in September, owing to the outbreak of War, considerable progress has been made. Government is also carrying out earth filling at Grove Road (Geylang Basin) and at Fort Road. During the year the Municipal Commissioners decided to fill Municipal land near Tanjong Katong Road—the Katong Fish Ponds—and work had almost been completed at the end of the year. This filling is being carried out by Government on behalf of the Municipality. Thus many low-lying areas constituting potential breeding grounds for mosquitoes are being finally dealt with. The work, however, in these areas has not as yet been completed and numerous breeding grounds for irritative mosquitoes abound in these areas, many being necessarily created during the actual filling process. Breeding is controlled as far as may be possible by oiling. It will, however, still be some time before the work is completed and the lands finally levelled off and drained. Certain earth disturbances in the vicinity of the Airport have required watching.

GENERAL ANTI-MOSQUITO WORK.

616,355 yards of earth drains were cleared and regraded by patrol gangs. These gangs collected and disposed of 14,040 large baskets of empty tins.

152 notices under the Destruction of Mosquitoes Ordinance were served during the year.

CONTROL OF DOMESTIC MOSQUITO BREEDING.

Mosquito larvae were found in 6,476 houses and compounds or 11.34% of all houses inspected for mosquito breeding.

147 complaints regarding nuisance from mosquitoes were investigated and mosquito breeding was found in the complainants' houses in 59 instances and in the property of the neighbours in 88 instances.

JOHORE WATER WORKS.

The permanent anti-malarial works at Gunong Pulai and Pontian were maintained but it was found necessary to make considerable extensions to the works at both Camps.

GUNONG PULAI.

Extensive jungle clearing, followed by rubber and pineapple planting, in the vicinity of the Camp had been carried out since the original anti-malarial protection works were completed in 1928.

The ultimate result of these activities was to render the clear water in several ravines close to the Camp ideal breeding places for A. maculatus. These ravines were, in themselves, formidable, being strewn with huge granite boulders, which rendered oiling of the innumerable small pools and seepages, open to sunlight between the boulders, extremely arduous and its efficiency open to doubt. In fact even survey work was quite a strenuous undertaking, let alone climbing over and around the boulders with a three gallon sprayer strapped on one's back.

In recent years such oiling, as was possible, was carried out by arrangement with the management of the rubber estate and the number of cases of malaria in the permanent staff at the Camp was well controlled.

The decision however in 1938 to re-open the Camp to house labour gangs engaged on the extension schemes of the Water Department made more active measures advisable, the labour force in camp being raised from 60 to about 450.

A survey was carried out which showed that the problem was com-licated. Prolific A. maculatus breeding was found in all ravines outside the controlled area of the Camp, some just within the half mile radius and a good deal in the ½/¾ mile belt.

At the same time adult A. maculatus mosquitoes were caught in a 'human bait' trap at the Camp.

The zone of oiling was extended to cover all breeding within the half mile limit and on immediate adjacent land, but it was ultimately found necessary to extend oiling to breeding places almost up to the mile limit before the numbers in the trap were reduced to a negligible figure.

It was further decided that some permanent measures must be taken to deal with potential breeding places, particularly those parts of the ravines where oiling was difficult.

The question of naturalistic methods of control was considered, but various factors were against any very great use of these.

It was ultimately decided that the heads of the ravines closest to camp should be permanently channelled and that those parts of the ravines where the boulder outcrops made oiling difficult should be dealt with.

The former presented few difficulties, the necessary channels and slabs being made on the site, and those portions of the stream bed were aligned and channelled where possible.

The boulder outcrops were dealt with by covering the open spaces which allowed sunlight to enter between the boulders to the water flowing below, and converting the mass into a large artificial cavern.

Corrugated iron sheets were cut to the required shape and laid over the spaces. These sheets were then re-inforced by half inch mesh wire netting and the whole covered by cement concrete. This made a continuous roof but as the boulders were naturally not all the same height, though there was a good fall, large hollows were thereby created in which rain water could be held. These were dealt with by making a sump at the lowest level in each hollow and packing with small granite.

This work is experimental, but so far has proved quite successful and durable. No breeding has been found and the sumps, which it was feared might be choked with leaves and debris, have functioned well, and no trouble has been experienced.

An effort is being made to persuade grass to grow over the roof."

Three ravines required treatment in this way.

Between the boulder-strewn part of the ravines where the land "flattened out," the stream bed was straightened and cleared of undergrowth so as to permit easy examination and oiling.

In one ravine it was found necessary to continue the channel for some distance on the 'flat' owing to the friable nature of the soil.

The main streams having been defined and channelled, seepages were trapped by subsoil pipes.

In places, where the materials were readily available, stickdrains were laid.

2,710 feet of open invert concrete channel, 2,900 feet of six-inch subsoil pipes, 4,214 feet of concrete revetment, 2,161 feet of stick drain and 3,683 feet of earth drain was constructed.

Together with the open spaces between boulders this work called for the use of 1,005 bags of cement, 99¾ cubic yards of granite chips, 194 sheets of corrugated iron and 9 rolls of half inch mesh wire netting.

PONTIAN.

To reduce the amount of supervision and oiling required it was decided to replace earth ditches by permanent channels or subsoil pipes. Here also the labour force was increased up to approximately 400.

All channels and slabs were made on the site.

1,604 feet of open invert channels, 2,108 feet of concrete revetment slabs were made and laid, and 924 feet of six-inch subsoil pipes were laid.

This called for the use of 332½ bags of cement.

Work is in progress.

During the year extensive jungle clearing was carried out on land immediately adjoining Municipal Commissioners' property. This land has been let to smallholders. A. maculatus has been found breeding in seepages which have been thus exposed or created by the activities of the smallholder. A limited amount of oiling has been carried out.

GENERAL.

With the increase in labour forces at Gunong Pulai, Pontian and at the 8½ mile-stone Johore Road, it was found necessary to release the Dresser-Overseers at Gunong Pulai and Pontian from all responsibility in connection with anti-malarial works. A temporary dresser was appointed for the Johore Road Dispensary at the 8½ mile-stone. Two temporary anti-malarial Field Workers were appointed, one at Gunong Pulai and one at Pontian.

Further extension of the water works at the 19th mile Pontian Road was commenced late in the year. This area is being watched.

The cost of all anti-malarial works in Johore was met from Water Department votes.

The closest contact was maintained with officers of the Water Department.

I have the honour to be,

Sir,

Your obedient servant,

W. E. HUTCHINSON,

Deputy Health Officer.

Chemical Laboratory,

Singapore, 5th February, 1940.

The Municipal Health Officer,

Singapore.

Sir,

I have the honour to report on the work done in the Chemical Laboratory during the year 1939.

The total number of samples analysed was 18,493 and these samples can be classified as follows:—

Public Water Supply	Routine samples from Singapore Island	7,903
	Routine samples from Johore ..	3,796
Sewage Purification	Routine and special samples from Sewage Purification Works ..	2,319
	Samples from House Installations	400
Foods, Drugs and Miscellaneous samples	Health Department samples ..	2,826
	Engineering Department samples	266
	Electrical Department samples ..	453
	Water Department samples ..	195
	Gas Department samples ..	331
	Other Departments	4

These figures are 6.1 per cent lower than the record figure for the previous year but they are 12.4 per cent higher than the 1938 figure and 31 per cent higher than the 1937 figure. The main decrease is in the number of sewage samples and this was due to a re-organisation of the times chosen for sampling at Alexandra Road.

MUNICIPAL WATER SUPPLY.

The sources of supply of raw water were Peirce and MacRitchie impounding reservoirs on Singapore Island and the Sultan Ibrahim and Pontian impounding reservoirs in Johore. The Peirce reservoir water was treated at Woodleigh and the MacRitchie reservoir water at Bukit Timah Road. The waters from both reservoirs in Johore were treated at Pulai, Johore.

An average of 22,704,000 gallons of water per day was used during the year, an increase of 8.2 per cent on the average for 1938. Practically one half of this water again came from Johore supplies. The characteristics of the raw waters from all the impounding reservoirs are very similar and again show no appreciable variations from the preceding year. The methods of treatment of the raw waters have not been altered (see the 1937 report) although the use of ammonia with chlorine was commenced during the year at Woodleigh and MacKenzie Road.

The quality of the mixed water which reaches the town from the pumping stations and the service reservoirs at Pearl's Hill and Fort Canning is checked by regular analyses of tap water taken from taps in use in three different parts of Singapore. The physical characteristics and chemical quality of the waters were excellent.

The samples received daily for analysis were drawn from every part of the purification system. The averages and ranges of analyses of the various raw waters are shown in detail in TABLE A at the end of this report, TABLE B gives the complete analyses of the waters taken from the Woodleigh and Pulai clear water tanks and TABLE C gives the complete analyses of two tap supplies in the town.

SEWAGES, EFFLUENTS ETC. FROM THE SEWAGE DISPOSAL WORKS.

As in the previous year, the whole of the sewage, with the exception of that treated in the small domestic installations, was purified at Alexandra Road Works to which an average of 6,169,000 gallons of water-borne sewage and 31,000 gallons of night soil were pumped daily. The volume of water-borne sewage shows an increase of 4.3 per cent and the night soil a decrease of 6.1 per cent on the 1938 figures.

The strength of the water-borne sewage showed little change over the last year's values but it seems obvious that much less solid matter was returned to the sewage inlet well as the outflow from the Detritus tank contained nearly 20 per cent less solids in suspension than for 1938.

The Dorr tank and the six Upward Flow tanks abstracted 56.4 per cent of the solid matter in suspension giving an effluent containing 14.9 parts per 100,000 as compared with 15.6 for the year 1938. The Upward Flow tanks were again much more efficient than the Dorr tank as it was found that the Dorr tank abstracted slightly less solid matter despite the fact that the sewage was left in the tank for a nearly 50 per cent longer period.

The fifty-four percolating filter beds worked fairly well during the year although the oxidation—the real function of these units—was not entirely satisfactory.

The bio-flocculation unit was finally closed down at the end of the year after many years of successful working giving a large amount of results from special experimental running. The unit treated 8.17 per cent of the outflow from the sedimentation tanks and abstracted 61.2 per cent of the solid matter in suspension. The effluent from this unit was treated at a relatively rapid rate in two filter beds.

The final outfalls from the Sewage Works were of satisfactory quality although the oxidation values might be higher.

TABLES D and E, attached, give the average and ranges of the analyses of sewages and effluents from various parts of the purification system.

SEWAGE EFFLUENTS FROM HOUSE INSTALLATIONS.

Excluding the Military and Government installations which are not inspected by the Municipality, there were 118 purification plants in use, including five maintained by the Singapore Harbour Board. During the year six new plants were erected and one of the existing ones was taken over by Government and two connected with the sewer. Of the 102 private plants fifty now have completely covered-in filter beds and six of the eleven Municipal plants are also covered. These covers are a proved success as they prevent bad odours and allow equally as good oxidation.

Excluding the three cattle shed tanks and the abattoir tank which definitely give poor results the average of the analyses carried out at three monthly intervals are as follows:—

Parts per 100,000	Effluent from 114 Municipally controlled House purification plants
Free & Saline ammonia	0.55
Albuminoid ammonia	0.10
Oxygen absorbed in 4 hours	0.53
Suspended matter	1.5
Chlorides as chlorine	4.9
Nitrates	1.6

These results are still an improvement on the good results obtained during previous years.

SAMPLES FROM THE HEALTH DEPARTMENT.

The total number of samples analysed was 2,826. These were obtained from various sources, including the Sanitary Inspectors of the Health Department and members of the laboratory staff. 1,402 samples were examined in connection with the Sale of Food and Drugs Ordinance, and 1,424 came under miscellaneous headings as follows:—

Well and pond waters	145
Swimming pool waters	692
Water from abattoirs	104
Various other waters	427
Coal	35
Various chemicals	13
Carbon dioxide gas	2
Blood	1
Human milk	1
Gastric juice	1
Urine	1
Pineapple bran	1
Metal mould	1
	1,424

The well waters were mainly from earth wells and in nearly every case showed definite signs of contamination. The swimming pool waters were taken regularly from the Singapore Swimming Club, Tanglin Club, Y.M.C.A. and Mount Emily pools. Most of the "other waters" were for examination in connection with anti-malarial works.

The following table gives the details of the samples analysed in connection with the Sale of Food and Drugs Ordinance, Chapter 191.

SAMPLE	OFFICIAL		INFORMAL		Total
	Satisfactory	Unsatisfactory.	Satisfactory	Unsatisfactory	
Milk from itinerant vendors	320	127	1	1	449
Milk from retail shops	..	..	147	6	153
Reconstituted milk	..	..	52	..	52
Milk drinks	..	..	52	..	52
Tinned milk	..	..	1	1	2
Evaporated milk	..	..	2	1	3
Milk powder	..	..	2	..	2
Cream	..	..	51	..	51
Separated milk	..	..	2	..	2
Ghee	..	..	2	..	2
Butter	..	..	..	2	2
Buttermilk	..	..	2	..	2
Ice Cream	..	..	3	3	6
Other Foods:					
Tinned foods	..	..	38	7	45
Tinned peas	..	1	5	9	15
Vinegar	..	..	17	..	17
Atta	..	..	3	2	5
Self raising flour	..	..	1	..	1
Baking powder	..	..	4	..	4
Sago flour	..	..	12	..	12
Sugar	..	..	1	..	1
Cooking fat	..	..	1	..	1
Beverages:					
Aerated water from fountains	..	..	163	61	224
Soda water from factories	..	..	11	..	11
Bottled aerated waters	3	..	41	37	81
Fruit drinks	..	..	8	1	9
Whisky	8	..	1	..	9
Brandy	4	..	..	..	4
Beer	..	..	3	..	3
Wine	..	..	1	..	1
Sherry	..	..	..	1	1
Fruit syrup	..	..	1	..	1
Drugs:					
Face powder	..	..	44	2	46
Boric acid	..	..	32	..	32
Sodium bicarbonate	..	..	27	2	29
Magnesium sulphate	..	..	28	..	28
Tartaric acid	..	..	13	..	13
Dextrose	..	..	12	..	12
Lime water	..	..	9	3	12
Quinine	..	..	..	3	3
Soft Paraffin	..	..	1	..	1
Ether	..	..	1	..	1
Preservative	..	..	2	..	2
	335	128	797	142	1,402

There was a decrease in the number of samples of milk brought in by the Sanitary Inspectors from itinerant hawkers, but samples were received regularly through the year. There was very little improvement in the quality of the milk sold by these vendors, as evidenced by the following summary of the results of analyses:

ANALYSES OF OFFICIAL MILK SAMPLES BOUGHT FROM ITINERANT HAWKERS.

Deficient in non-fatty solids (i.e. with added water)	Number of Samples ..	447
	Number	117
	Percentage	26.2
	Range of deficiency ..	0.6% to 47.0%
	Average deficiency ..	10.95%
Deficient in Fat ..	Number	17
	Percentage	3.8
	Range of deficiency ..	1.5% to 52.3%
	Average deficiency ..	8.51%

Seven samples were deficient in both fat and non-fatty solids, making the total number of unsatisfactory samples 127 or 28.4% Certificates for prosecution purposes were made out in 85 cases where the extent of the deficiency was great enough to preclude any possibility of it being due to abnormality of the milk. This makes the proportion of samples definitely adulterated 19.0% and the average amount of added water in these was 15.77%.

Apart from the prejudice of the purchaser in these cases by the substitution of water for milk, there is always the likelihood that an unsafe source of water has been used. As noted earlier in the report, the waters from earth wells examined were found almost without exception to be polluted.

The milk samples from retail shops were satisfactory, apart from one or two occasions when the non-fatty solids did not quite come up to the legal minimum. Other milk products were in order, except two mouldy samples of butter and three samples of ice-cream containing less than 10% of butter fat.

The tinned foodstuffs were duplicate tins of samples examined a year previously. It was found that the extra year of storage had made no appreciable difference to the content of poisonous metals, making allowance for variation from tin to tin. Most of the tinned peas contained copper as an artificial colouring matter which seems unnecessary when some brands can manage without it. A prosecution was instituted in one case. Vinegar samples were satisfactory, except that labelling regulations had been more or less completely ignored.

The usual check was kept on the aerated water supplied by small fountains through the year. This is necessary on account of the lead-solvent action of the local water; any repairs in which a lead solder is used result in the appearance of lead in the water. In such cases, the machine must not be operated until the repair has been carried out properly and the product is free from lead. A large number of the "soft drinks" so popular in Singapore were also examined for poisonous metals and preservatives. It was found that some firms were using salicylic acid as preservative, which is not allowed. Under the new regulations, benzoic acid (up to 120 parts per million) will be allowed, but some brands contained quantities in excess of this. The firms concerned were given information concerning the current and proposed regulations.

The drugs were on the whole very satisfactory. The type of face powder containing lead has almost disappeared from the market. Of two samples discovered, one came from up country and the other was the only packet of its kind. One sample of sodium bicarbonate contained lead in excess of the Pharmacopoeia limit, and another was partly sodium carbonate. Two unsatisfactory limewater samples were deficient in lime, and the third was not lime water, but a suspension of excess lime in water.

Samples were analysed for other departments as shown in the following table:—

SAMPLES	Water Dept.	Electrical Dept.	Engineering & Sewage Dept.	Gas Dept.	Total
Various waters	4	1	165	2	172
Various earths, sludges, deposits, etc.	65	..	..	..	65
Sand	4	..	46	..	50
Cement, concrete	1	..	3	..	4
Coal	16	432	21	57	526
Fuel oil	..	12	..	..	12
Coke	..	..	..	246	246
Gas	..	..	4	1	5
Ash	..	2	1	..	3
Riddlings	..	2	..	..	2
Coal tar	..	..	..	3	3
Oxide	..	..	..	22	22
Lime	52	..	..	..	52
Alumina	7	..	..	..	7
Limestone	22	..	..	..	22
Turpentine	..	..	2	..	2
Methylated spirit	..	4	2	..	6
Lubricating oil	21	..	20	..	41
Glazed & stone pipes ..	..	..	2	..	2
Copper pipes	2	..	..	..	2
Chlorine tester	1	..	..	..	1
TOTAL ..	195	453	266	331	1,245

Various Departments:—

Scrapings from buckets—Town Cleansing Dept.	2
Chemical—Fire Brigade	1
Fire extinguisher—Fire Brigade	1

I have pleasure in recording my thanks to the loboratory staff for their loyal and willing co-operation with Mr. Clark and myself.

I have the honour to be,

Sir,

Your obedient servant,

R. E. WILLGRESS,

A.R.C.S., B.Sc., F.I.C.,

Municipal Analyst,

Singapore.

TABLE A.

Averages and Ranges of Monthly Analyses of Singapore and Johore Raw Waters for 1939.

PARTS PER MILLION.	MacRitchie Reservoir		Peirce Reservoir		Sultan Ibrahim Reservoir		Pontian Ketchil Reservoir	
	Range.	Average.	Range.	Average.	Range.	Average.	Range.	Average.
Total solids dried at 180°C	23.6/42.0	32.1	18.4/30.4	25.3	29.6/45.6	36.9	30.4/45.2	36.6
Organic Matter ..	11.6/28.0	20.6	10.4/18.8	14.5	10.0/18.4	14.8	14.4/24.4	18.8
Mineral Matter ..	8.0/14.8	11.5	6.4/20.0	10.8	17.6/32.0	22.1	16.0/20.8	17.8
Total solids in suspension ..	1.6/4.8	3.2	0.8/5.6	2.8	1.2/9.6	3.9	0.8/11.2	3.6
Free and Saline Ammonia .	0.01/0.02	0.01	0.01/0.02	0.01	0.01/0.36	0.06	Abs./0.08	0.02
Albuminoid Ammonia ..	0.02/0.12	0.06	0.01/0.08	0.04	0.01/0.10	0.05	0.02/0.12	0.06
Nitrites as Nitrogen ..	Abs./Abs.	Absent	Abs./Abs.	Absent	Abs./trace	Absent	Abs./trace	Absent
Nitrates as Nitrogen ..	Abs./0.01	Absent	Abs./0.01	Absent	Abs./0.04	Absent	Abs./0.01	Absent
Oxygen absorbed in 3 mins.	0.14/0.36	0.26	0.16/0.36	0.27	0.15/0.66	0.28	0.22/0.51	0.37
Oxygen absorbed in 4 hours	0.50/1.07	0.80	0.54/1.23	0.80	0.58/1.31	0.79	0.44/1.30	1.02
Chlorides as Chlorine ..	1.0/6.0	2.0	1.0/5.0	1.9	1.0/3.0	1.5	1.0/2.0	1.3
Iron ..	0.50/1.50	0.86	0.25/0.70	0.38	0.30/4.50	0.84	0.60/1.00	0.73
Reaction—PH Value ..	5.9/6.6	6.4	5.9/6.7	6.3	5.3/7.3	6.8	6.4/7.4	6.9
Total Hardness (as $CaCO^{3}$)	3.3/9.6	5.1	2.8/5.6	4.0	....	..	....	..
Permanent Hardness (as $CaCO^{3}$ ..	....	2.1	....	1.7	....	..	....	..
Temporary Hardness (Alkalinity as $CaCO^{3}$) ..	2.0/4.0	3.0	2.0/3.0	2.3	4.0/9.0	6.0	6.0/8.0	7.5
Carbon Dioxide ..	1.0/4.0	2.1	1.0/3.5	1.9	1.0/21.0	4.5	1.0/7.0	2.4
Colour in Lovibond 2 ft. Tintometer: Yellow ..	5.0/12.5	7.8	2.5/7.0	4.4	3.0/14.0	5.4	4.0/7.5	6.0
Red ..	1.3/3.0	2.0	0.6/2.2	1.3	0.7/11.0	2.3	1.2/2.2	1.7
Blue ..	0.1/0.5	0.2	0.1/0.5	0.2	0.1/5.0	0.6	0.1/0.8	0.2

TABLE B.

Averages and Ranges of Monthly Analyses During 1939 of Woodleigh and Gunong Pulai Clear Water Tanks.

PARTS PER MILLION.	PULAI CLEAR WATER TANK.		WOODLEIGH CLEAR WATER TANK.	
	Range.	Average	Range.	Average
Total Solids dried at 180°C	44.8/60.0	54.2	27.6/64.8	35.8
Organic Matter ..	10.4/17.6	13.6	4.4/48.0	15.5
Mineral Matter ..	32.8/47.2	40.6	14.8/28.0	20.3
Total Solids in suspension	0.4/4.0	1.4	0.4/3.2	1.3
Free and Saline ammonia	0.01/0.18	0.06	0.01/0.08	0.02
Albuminoid ammonia ..	0.01/0.10	0.03	0.01/0.04	0.02
Nitrites as Nitrogen ..	Abs./trace.	trace	Abs./trace	Absent
Nitrates as Nitrogen ..	Abs./trace.	Absent	Abs./0.01	Absent
Oxygen absorbed in 3 mins.	0.03/0.16	0.10	0.03/0.17	0.07
Oxygen absorbed in 4 hours	0.15/0.33	0.26	0.12/0.51	0.31
Chlorides as Chlorine ..	1.0/3.0	1.7	1.0/3.0	1.8
Iron ..	0.05/0.15	0.07	0.05/0.20	0.12
Reaction—PH Value ..	7.2/9.3	8.4	6.8/8.7	7.8
Total Hardness (as $CaCO^3$)	19.7/29.1	25.3	15.0/21.6	17.8
Permanent Hardness (as $CaCO^3$)	....	9.0	....	3.4
Temporary Hardness (Alkalinity as $CaCO^3$) ..	8.0/23.0	16.3	12.0/17.0	14.4
Carbon Dioxide ..	Abs./2.0	0.7	Abs./4.0	1.5
Colour in Lovibond 2 ft. Tintometer: Yellow ..	0.6/0.9	0.7	0.7/1.5	0.9
Red ..	0.1/0.1	0.1	0.1/0.5	0.2
Blue ..	0.1/1.0	0.5	0.1/0.5	0.3

TABLE C.

Averages and Ranges of Monthly Analyses During 1939 of Singapore Tap Supply.

PARTS PER MILLION.	HAVELOCK ROAD TAP SUPPLY.		COLEMAN STREET TAP SUPPLY.	
	Range	Average	Range	Average
Total solids dried at 180°C	34.0/96.8	49.6	32.8/52.4	40.5
Organic Matter ..	9.2/23.2	13.7	10.4/21.2	13.8
Mineral Matter ..	20.0/73.6	35.9	20.0/38.4	26.7
Total solids in suspension	0.4/2.4	1.1	0.4/4.0	1.3
Free and saline ammonia	0.01/0.06	0.02	0.01/0.02	0.01
Albuminoid ammonia ..	0.01/0.04	0.02	0.01/0.04	0.02
Nitrites as Nitrogen ..	Abs./trace	trace	Abs./trace	trace
Nitrates as Nitrogen ..	Abs./0.02	0.01	Abs./0.02	Absent
Oxygen absorbed in 3 mins.	0.04/0.20	0.10	0.07/0.23	0.11
Oxygen absorbed in 4 hours.	0.17/0.37	0.28	0.16/0.37	0.27
Chlorides as Chlorine ..	1.0/4.0	1.8	1.0/3.0	1.9
Iron ..	0.05/0.55	0.15	0.05/0.55	0.19
Reaction—PH Value ..	6.7/8.9	7.6	6.7/7.5	7.2
Total Hardness (as $CaCO^3$)	16.9/36.7	21.6	17.3/22.1	19.0
Permanent Hardness (as $CaCO^3$) ..	....	6.5	....	4.0
Temporary Hardness (=Alkalinity as $CaCO3$) ..	9.0/26.0	15.1	11.0/20.0	15.0
Carbon Dioxide ..	Abs./5.0	2.5	0.5/4.0	2.8
Colour in Lovibond 2 ft. .. Tintometer—Yellow	0.7/3.2	1.1	0.8/3.6	1.5
Red	0.1/0.6	0.2	0.1/0.8	0.3
Blue	0.1/0.8	0.3	0.1/0.8	0.2

TABLE D.

Averages of Daily Analyses of Crude Sewage and Effluents from Alexandra Road Works during 1939.

PARTS PER 100,000	AMMONIA		Oxygen absorbed in 4 hours	Total Solids	Suspended Matter	Nitrates as Nitrogen	Chlorides as Chlorine	Dissolved Oxygen absorbed in 3 days	P.H. Value
	Free	Albuminoid							
1. Crude Sewage	4.5	0.9	7.31	96.4	29.4	..	20	..	7.0
2. Detritus Tank Effluent	4.7	1.0	8.17	94.2	34.2	..	20	..	7.0
3. Dorr Tank Effluent	6.3	0.8	5.36	87.6	15.1	..	25	..	7.2
4. Effluent 6 Upward Flow Tanks ..	6.2	0.8	5.17	100.1	14.7	..	28	..	7.2
5. Calculated Average Tank Effluent ..	6.3	0.8	5.27	93.5	14.9	..	26	..	7.2
6. Humus Tanks' Effluent .. .									
(1) From Blocks A, B & E .	1.20	0.14	1.14	84.3	1.6	1.3	24	1.29	..
(2) From Blocks C & D ..	1.41	0.17	1.30	82.3	2.1	0.7	26	1.59	..
7. Bio-flocculation Unit Effluent ..	5.9	0.6	2.99	74.4	5.7	..	23	..	7.5

TABLE E.

Ranges of Daily Analyses of Crude Sewage and Effluents from Alexandra Road Works During 1939.

PARTS PER 100,000	AMMONIA		Oxygen absorbed in 4 hours	Total Solids	Suspended Matter	Nitrates as Nitrogen	Chlorides as Chlorine	Dissolved Oxygen Absorbed in 3 Days	P.H. Value
	Free	Albuminoid							
1. Crude Sewage	2.4/8.0	0.2/2.0	2.55/14.35	54.0/249.2	8.3/59.5	..	7/105	..	6.3/7.6
2. Detritus Tank Effluent	2.4/7.5	0.4/2.0	3.10/14.90	47.2/171.0	5.5/81.5	..	6/100	..	6.8/7.6
3. Dorr Tank Effluent	2.4/9.6	0.2/1.8	2.90/8.45	39.4/219.6	7.3/25.0	..	11/167	..	6.5/7.7
4. Effluent 6 Upward Flow Tanks ..	3.0/9.8	0.2/1.6	2.50/8.45	36.4/404.4	8.5/27.5	..	11/170	..	6.5/7.8
5. Humus Tanks' Effluent									
(1) From Blocks A, B & E ..	0.12/2.56	0.02/0.32	0.56/1.82	39.6/223.6	0.3/3.3	0.1/4.3	10/90	0.18/2.70	..
(2) From Blocks C & D ..	0.42/3.00	0.04/0.48	0.68/2.88	30.8/246.0	0.6/9.2	0.1/4.9	12/98	0.30/3.80	..
6. Bio-flocculation Unit Effluent ..	3.0/9.6	0.2/1.0	1.32/4.30	45.2/165.6	2.2/9.6	..	10/73	..	6.3/7.7

Municipal Bacteriological Laboratory,
Singapore, 14th February, 1940.

The Municipal Health Officer,
Singapore.

Sir,

I have the honour to present the report of the Bacteriological Laboratory for 1939.

I. PUBLIC HEALTH SPECIMENS.

Malaria:—Six thousand and thirty-three blood films were examined, which is 839 more than last year. Malaria parasites were found in 1,152 or 19.1 per cent. This is a considerable increase on the figures for the last two years which were 11.9 and 11.2 per cent respectively. There were 828 positive films from the Johore Water Works, 129 from the Health Department and 195 from Practitioners. No films taken after death were received. There were 576 subtertian infections, 574 benign tertian and 2 mixed infections (benign tertian rings and subtertian crescents). It is probable that there were many more mixed infections but prolonged examination of the slides is not possible in the time that can be devoted to each slide.

TUBERCULOSIS.

Human Specimens:—1,815 specimens of sputum were examined and the tubercle bacillus was found in 371. Four specimens of faeces were all negative. Three out of 7 specimens of urine were positive, and 3 out of 19 specimens of cerebrospinal fluid. Four specimens of pus examined were all negative. Four inoculation experiments were done but no positive results were obtained.

Animals:—One specimen of pig's lung, and 1 specimen of pig's kidney were examined but were negative.

Milk:—107 samples of milk and 53 of cream were examined, but all were negative.

TYPHOID & PARATYPHOID FEVERS.

Two hundred and three sera were tested against Eb. typhi and 55 were positive, one hundred and seventy-six were tested against Sal. paratyphi, and against Sal. schottmulleri, and 4 were positive with the former and 3 with the latter organism. Of 43 specimens of blood or blood clot, all were negative, while 2 out of 91 samples of faeces were positive. All of 14 specimens of urine were negative. Only 1 specimen of ice ball and 1 of ice cream were examined but no bacteria of the Enteric Group were isolated.

DYSENTERY.

Amoebic:—1,614 specimens were received of which 62 contained E. histolytica, 9 contained E. coli and 2 E. nana.

Bacillary:—350 specimens were cultured and the B. dysenteriae of Flexner isolated twice, Hiss & Russell's bacillus was isolated 3 times and Sonne's bacillus twice.

Cholera:—One specimen was received but the V. cholerae was not isolated.

Plague:—No human specimens were received.

Rats:—3,283 rats were examined but none were found infected with plague. The species and distribution are shown below:—

Source	R. Decumanus		R. Rattus		R. Concolor		Musculus		Crocidura	Total
	M	F	M	F	M	F	M.	F		
Ports & Ships	84	113	248	369	28	35	1	1	191	1,070
Town ..	458	930	76	109	151	222	23	54	190	2,213
	542	1,043	324	478	179	257	24	55	380	3,283
	1,585		802		436		79			

The proportion of rattus to decumanus among the town rats was 1 to 7.5 while in the port area it was 3.14 to 1. The percentage of females pregnant was 11.1 in the town and 10.8 in the port area. Blood films from 2,235 rats were examined and trypanosomes were found in 298.

Fleas:—Three thousand five hundred and forty-five fleas were caught making a flea index of 108. The index for the Port was 126 and in the town it was 99.

Cerebro-Spinal Fever:—Fifty-seven specimens were examined and the meningococcus was found in 14.

Diphtheria:—Four thousand two hundred and sixty-four specimens were examined and the C. diphtheriae was found in 798. Thirty-nine virulence tests were done and 17 cultures were proved virulent and 22 avirulent.

The application of a solution of Pot. tellurite (2%) to inflamed throats has been advocated as a quick method of diagnosing diphtheria in doubtful cases, and the method has been applied to throat swabs. The presence of C. diphtheriae is revealed, it is said, by the swab becoming black or, at any rate, dark in colour. Ninety-six swabs were examined in the laboratory by this method and the results of the test agreed with those obtained in culture in 72 cases, i.e. 63 were negative by both tests, and 9 positive. In 14 cases the tellurite test was positive and culture negative, and in 10 the tellurite test was negative when the C. diphtherise was present in culture. The test failed therefore in 25 per cent. of cases.

One hundred and four cultures were examined as to their appearance on tellurite medium, in broth, and their reactions in glucose, saccharose, dextrin and starch media. The results were compared with those given by cultures of C. diphtheriae (gravis) and C. diphtheriae (mitis) brought from England. None of the organisms isolated formed the "daisy head" colony typical of the true gravis form and none of them fermented starch in the way the gravis colony did. All of them fermented glucose, and 102 fermented dextrin, in serum water media, while 5 produced acid in saccharose. In broth 40 produced turbidity, 36 formed pellicles and 59 formed granules. Ten of these colonies were tested for virulence and 8 were virulent and 2 non-virulent. Of the eight virulent strains, 2 were granular and 6 were turbid. The cultures were obtained from 100 patients of whom 8 died. Six of the fatal cases were laryngeal, and 2 faucial diphtheria and four of the laryngeal cases and 1 of the faucial were caused by bacteria giving granules in broth, or intermediate type, the others were caused by the uniformly turbid or mitis type.

No strains of gravis type were therefore found. Intermediate types caused more deaths than the mitis type. No stress can be laid on the fact that 6 out of 8 virulent strains were turbid, or mitis, because the test for virulence is only done when the bacillus is persisting for a long time in the throat, after the patient has recovered. and is really done to see if he can be discharged from hospital.

Leprosy:—Sixty-one cases were examined and in 14 the Myco. leprae was demonstrated.

Miscellaneous Included:—

529 specimens of Urine for General Examination (1).

156 ” „ Pathological Exudate for General Examination.

9 ” „ Serum for T. pallida (1 positive).

577 ” „ Pus for Gonococci (147 positive).

11 ” „ Urine for Gonococci (4 positive).

10 ” „ Prostatic smears for Gonococci (3 positive).

14 ” „ Blood for Differential Count (2).

2,015 ” „ Blood for Wassermann Reaction (274 positive).

1,980 ” „ Blood for Kahn Reaction (300 positive).

10 ” „ Blood for Weil Felix Reaction (1 positive OXK).

6 ” „ Blood for Filaria (1 positive).

2 ” „ Blood for B. melitensis (both negative).

1 specimen „ Blood for B. abortus (negative).

3 specimens „ Blood for Davidsohn's Test.

3 ” „ Blood from Dogs for Piroplasmosis (all negative).

2,235 ” „ Blood from Rats for Trypanosoma lewisi (298 positive).

7 ” „ Smears from Rats for Acid-fast bacilli (all negative).

14 ” „ Kidneys from Rats for Leptospira (all negative).

322 ” „ Urine from Rats for Leptospira (all negative).

5 specimens of Slime for Leptospira (all negative).

6 ,, ,, Organs from Guinea pigs for Leptospira (all negative).

2 ,, ,, Urine from Dogs for Leptospira (Both negative).

5 ,, ,, Faeces for B. abortus (all negative).

2 ,, ,, Faeces for Occult Blood (both negative).

6,219 ,, ,, Faeces for Intestinal Parasites (3).

10 ,, ,, C. S. Fluid for Wassermann Reaction (all negetive).

10 ,, ,, C. S. Fluid for Kahn Reaction (all negative).

1 specimen of C. S. Fluid for Pneumococci (positive).

1 ,, ,, Pus for Pneumococci (negative).

1 ,, ,, Sputum for Pneumococci (negative).

212 specimens of Milk.

53 ,, ,, Cream.

62 ,, ,, Ice Cream.

5 ,, ,, Vaccine.

2 ,, ,, Disinfectant.

(1). These specimens came mostly from the M.O. in charge of staff in connection with medical examination.

(2). Mostly from Middleton Hospital.

(3).

Ankylostome ova present	1,052
Ascaris ,, ,, ...	819
Trichuris ,, ,, ...	1,350
Oxyuris ,, ,, ...	42
Strongyloids	18
Trichomonas	7
T. saginata	2
Giardia cysts	28
Maggot (unidentified)	1

Wassermann and Kahn Reactions:—2,015 specimens of blood and 10 of cerebro-spinal fluid were examined, of which 274 gave a positive Wassermann Reaction, 1,700 were negative and 51 were anticomplementary. The Kahn Reaction, which was performed on 1,990 specimens, agreed with the Wassermann in 94 per cent of cases. Of the 51 anticomplementary bloods, 7 had a positive Kahn and 44 a negative Kahn. Forty-four anticomplementary specimens out of 51 came from ante-natal clinics.

The results are summarized below:—

SOURCE.	Wassermann and Kahn						Wassermann only			
	++	——	+—	—+	A.C.+	A.C.—	+	—	A.C.	Total
L.M.O.										
Females	44	131	2	14	2	2	—	—	—	195
Males	7	31	—	3	—	—	—	1	—	42
Infants	25	124	2	—	—	—	—	14	—	165
Anti-Natal	40	723	13	8	3	26	—	3	—	816
St. Andrew's Hospital										
Anti-Natal	10	334	3	2	1	14	—	—	—	364
V. D. Dept.	24	56	—	9	—	—	3	10	—	102
General	23	104	—	6	—	—	—	3	—	136
Middleton Hospital	8	14	—	1	—	—	1	—	—	24
Health Office	57	36	2	1	—	1	—	—	—	97
Kwong Wai Siu Hospital ..	1	3	—	—	1	1	—	—	—	6
Cerebro-Spinal Fluids ..	—	10	—	—	—	—	—	—	—	10
Others	8	57	1	2	—	—	—	—	—	68
	247	1,623	23	46	7	44	4	31	—	2,025

LEPTOSPIROSIS.

Several cases of leptospirosis ending fatally were reported during the year. Some of them came from Tembeling Road and others from the Kampong Soopoo district. Slimy water from kitchens and bathrooms of the houses occupied by the victims was obtained. Although leptospirae were found and cultivated from these samples the organisms proved non-virulent on inoculation with guinea pigs and rabbits. They were undoubtedly leptospira biflexa. This organism was found in water from Pierce Reservoir also and is quite common. No leptospira were found in, or cultivated from, any of the human material received and none of the animals inoculated with it developed jaundice. One guinea pig inoculated with kidney and liver emulsion from an experimental guinea pig received from outside died with jaundice. The lesions however were not very typical and no leptospirae were recovered.

Urine from 284 rats was examined by dark ground illumination and leptospirae were seen in 3. These rats came from Boat Quay, Tanjong Pagar and one from an unknown source. Unfortunately as they were not from the district where the cases of leptospirosis were living the kidneys had not been preserved and the organism failed to grow in culture. The kidneys of 52 rats were examined with negative results.

Blood and urine from a jaundiced dog was also examined but no leptospirae were found.

The blood of rabbits which had been inoculated with suspected material was injected intracerebrally into mice. None of these developed any symptoms of disease and all were killed later but the brains have not been examined yet.

The total number of public health specimens received was 27,131 involving 32,879 examinations.

II. WATER.

Ten thousand eight hundred and twenty samples from the Municipal Supply were analysed. The results were very satisfactory and there is no need for doubt as to the purity and safety of the water supplied as long as the present checks are maintained.

The results of analyses of samples taken regularly at the main points of the system are tabulated below. In addition to these samples, the effluent from the filters in action each day, was also tested.

The results of analysis are summarised in the following table:—

YEAR OF 1939.

SOURCE.	Agar counts per ml. at 37°C in 24 hours.	Lactose fermenters present in:—					
		—100	+100	+10	+1	+0.1	+0.01
Sultan Ibrahim V. Tower ..	119	6.7	93.3	26.3	0.4	—	—
„ „ C. W. Tank	19	99.6	0.4	—	—	—	—
Seletar Dan ..	371	3.0	97.0	65.4	6.6	—	—
Pierce Res. V. Tower ..	123	7.1	92.9	44.8	3.4	—	—
Mac Ritchie Res. V. Tower	131	0.8	99.2	70.7	5.4	—	—
Bukit Timah Raw ..	147	58.3	41.7	15.6	0.5	—	
Woodleigh C. I. Main ..	132	18.8	81.2	30.3	1.8	—	—
Pearl's Hill I Depth ..	55	70.6	29.4	—	—	—	—
„ „ II „ ..	56	74.0	26.0	0.9	—	—	—
Fort Canning Res. ..	52	95.4	4.6	—	—	—	—
Tap (Laboratory) ..	51	99.1	0.9	—	—	—	—
„ (Lorong Lalat) ..	57	93.8	6.2	0.4	—	—	—
„ (Havelock Rd.) ..	64	89.0	11.0	—	—	—	—
„ (Average of 3 taps) ..	59	94.0	6.0	0.1	—	—	—

Samples taken at different points along the pipe line showed that the water from the filter plant at Gunong Pulai did not suffer any contamination on its journey to Singapore. Samples from new mains were examined regularly and only when all contamination occurring during the laying had been got rid of was the water put into use.

Mount Emily Swimming Pool was regularly examined and remained free from dangerous contamination during the year. The results are tabulated below:—

SOURCE.	Average No. of Colonies on agar per ml. at 37°C in 24 hours.	Lactose fermenters present in Percentage of Samples.					
		—100	+100	+10	+1	+0.1	+0.01
Shallow End 7.30 a.m. ..	62	81.6	18.4	1.0	—	—	—
Deep End 7.30 a.m. ..	44	89.2	10.8	0.4	—	—	—
Shallow End 2 p.m. ..	22	100.0	—	—	—	—	—
Deep End 2 p.m. ..	24	100.0	—	—	—	—	—

Two hundred and ninety-six samples of river water taken at Kota Tinggi were examined. The samples consisted of 3 series taken at the surface, at middle depth, and at the bottom. The results were very uniform as can be seen by the following table:—

Source.	Averag No. of Colonies on agar per ml. at 37°C in 24 hours.	Lactose fermenters present in Percentage of Samples.				
		10 ml.	1 ml.	0.1 ml.	0.01 ml.	0.001 ml.
Surface ..	4,643	100.0	100.0	91.8	46.9	—
Middle ..	4,474	100.0	100.0	89.9	46.5	—
Bottom ..	4,823	100.0	100.0	91.9	50.5	—

Three hundred and eighty-six miscellaneous samples were examined.

Algae continued to give some trouble during the year particularly in Mount Emily Swimming Pool. A method was devised, on the lines of one used by the Metropolitan Water Board, of taking photographs of the deposit settling out from 10 ml. of water in 24 hours. This gives one a clearer idea of the number of algae and amount of suspended matter than is obtained from counting, a laborious process. The photographs are taken directly on bromide paper and are therefore negatives, and do not lend themselves readily to reproduction. A few are attached as a matter of interest. Copies are sent daily to the Water Engineer. In addition to the photographs 920 samples were examined directly for algae.

Two hundred and six colonies were isolated from the lactose tubes and studied.

These were:—

B. coli type I	32
„ „ „ II	5
Aerogenes type I	93
„ „ II	8
Intermediate type I	16
„ „ II	9
Irregular	43

III. SEWAGE.

Fifty-two samples of chlorinated effluent from the Middleton Hospital were examined. The average number of colonies was 1,823 per ml. Lactose fermenters were not present in 100 ml. in 13.5 per cent. of samples, and were present in 100 ml. in 86.5 per cent. In 10 ml. they were present in 65.5 per cent., in 1 ml. in 59.7 per cent., in 0.1 ml. in 53.9 per cent., in 0.01 ml. in 44.3 per cent., in 0.001 ml. in 30.8 per cent. and in 0.0001 ml. in 9.8 per cent. These results are rather poor.

Fifteen samples of wash water from the Conservancy Department were satisfactory.

IV. MORTUARY.

There were three postmortem examinations the causes of death being:—

Diphtheria	2
Tuberculosis of lungs	1

V. STAFF.

I returned from home leave on 10th July and wish again to record my appreciation of the work of the laboratory staff during the year.

I have the honour to be,

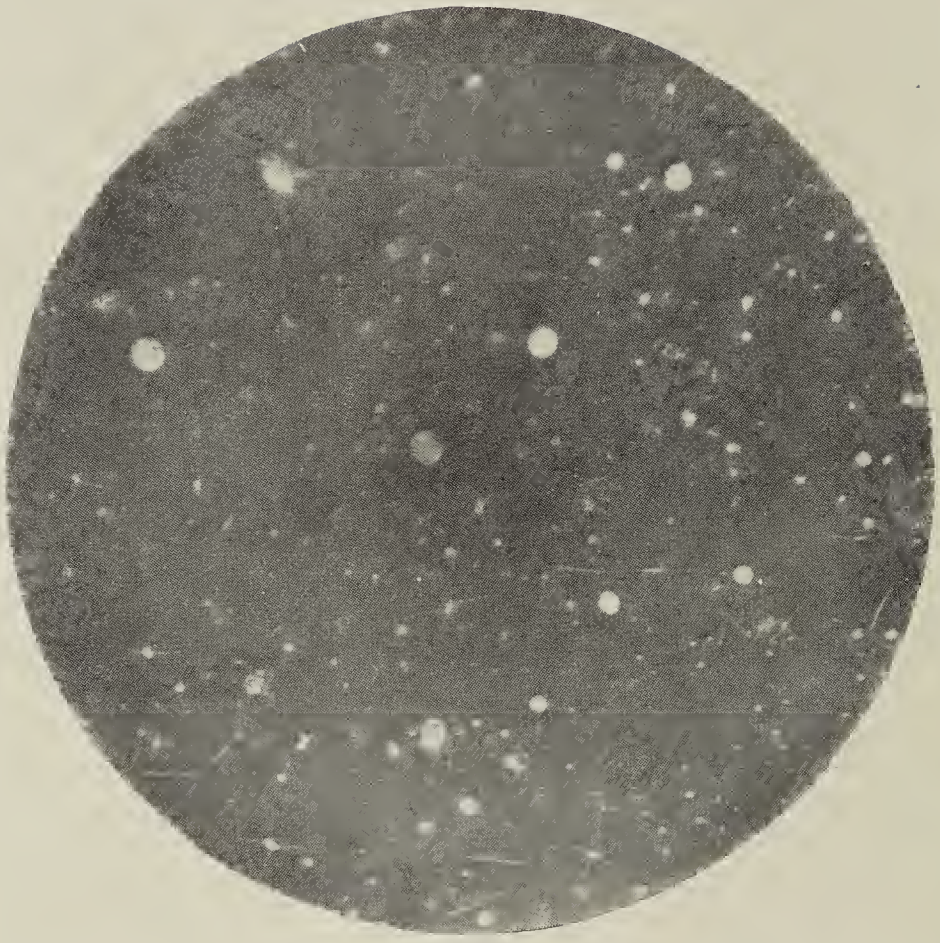
Sir,

Your obedient servant,

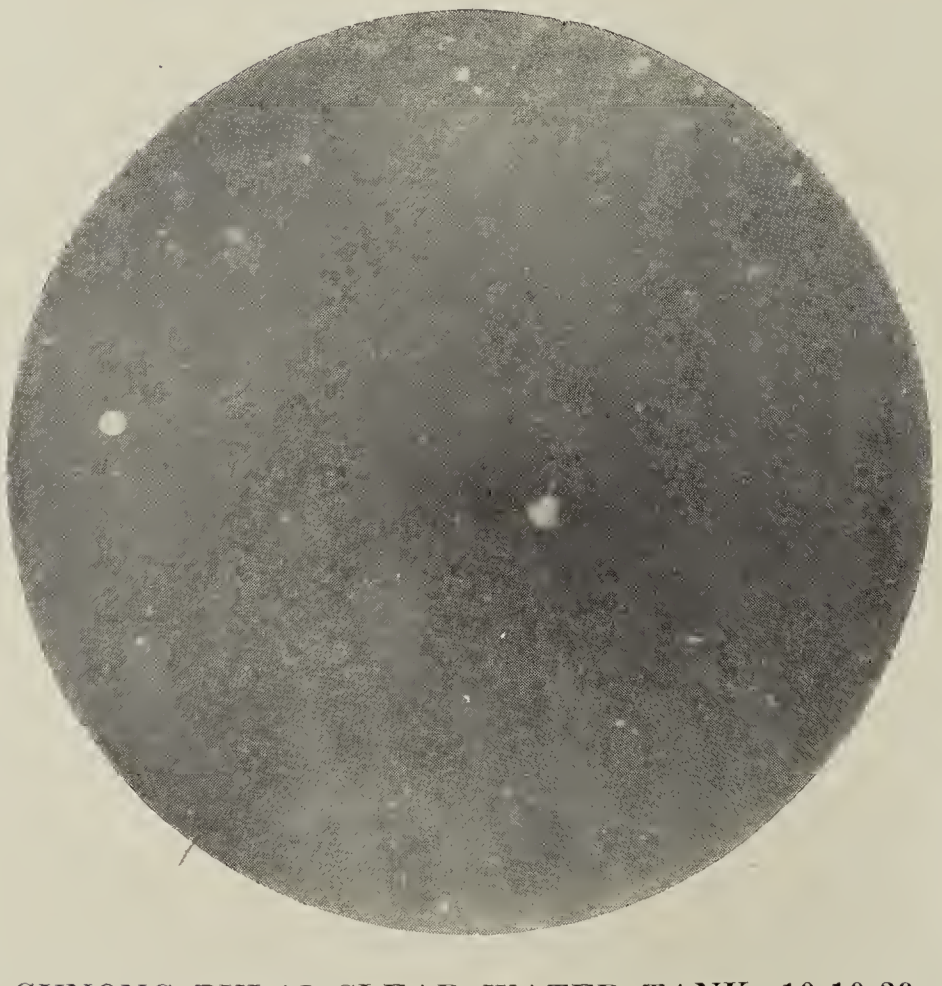
C. C. B. GILMOUR,

M.A., M.B., Ch. B.,

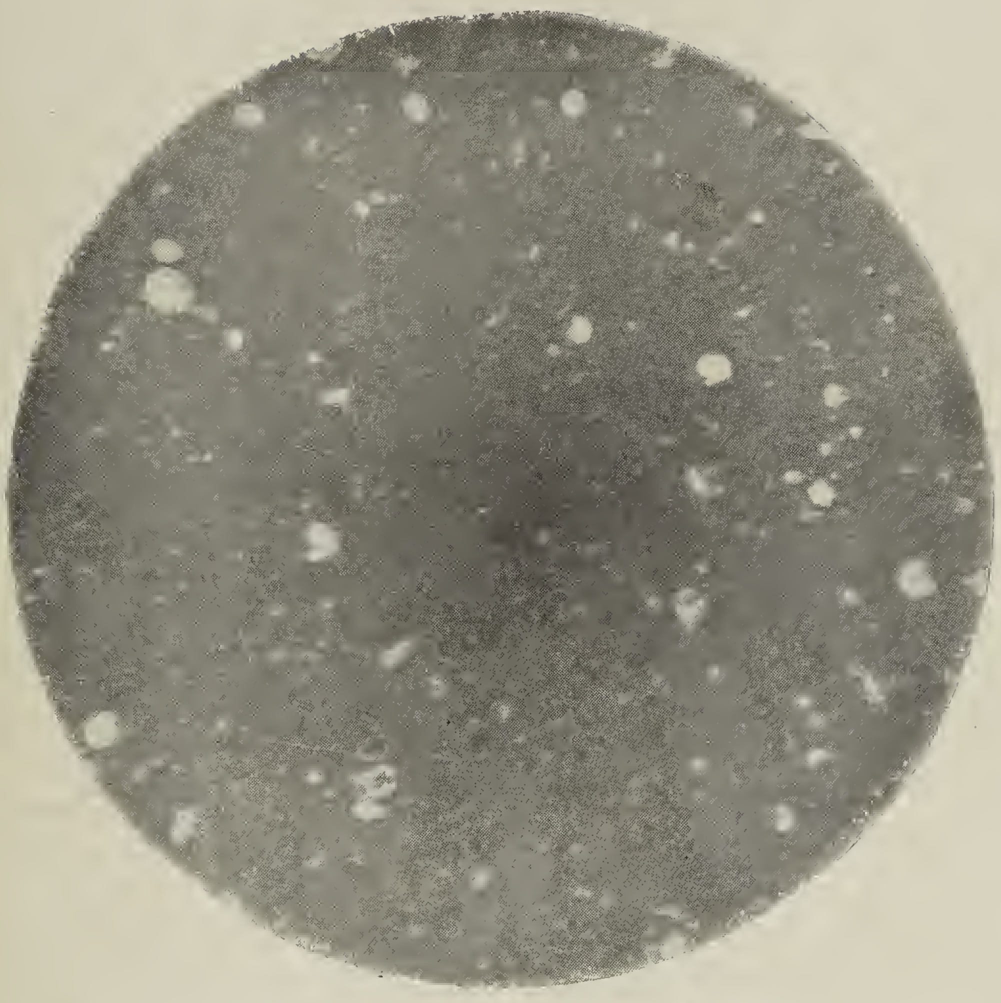
Municipal Bacteriologist.



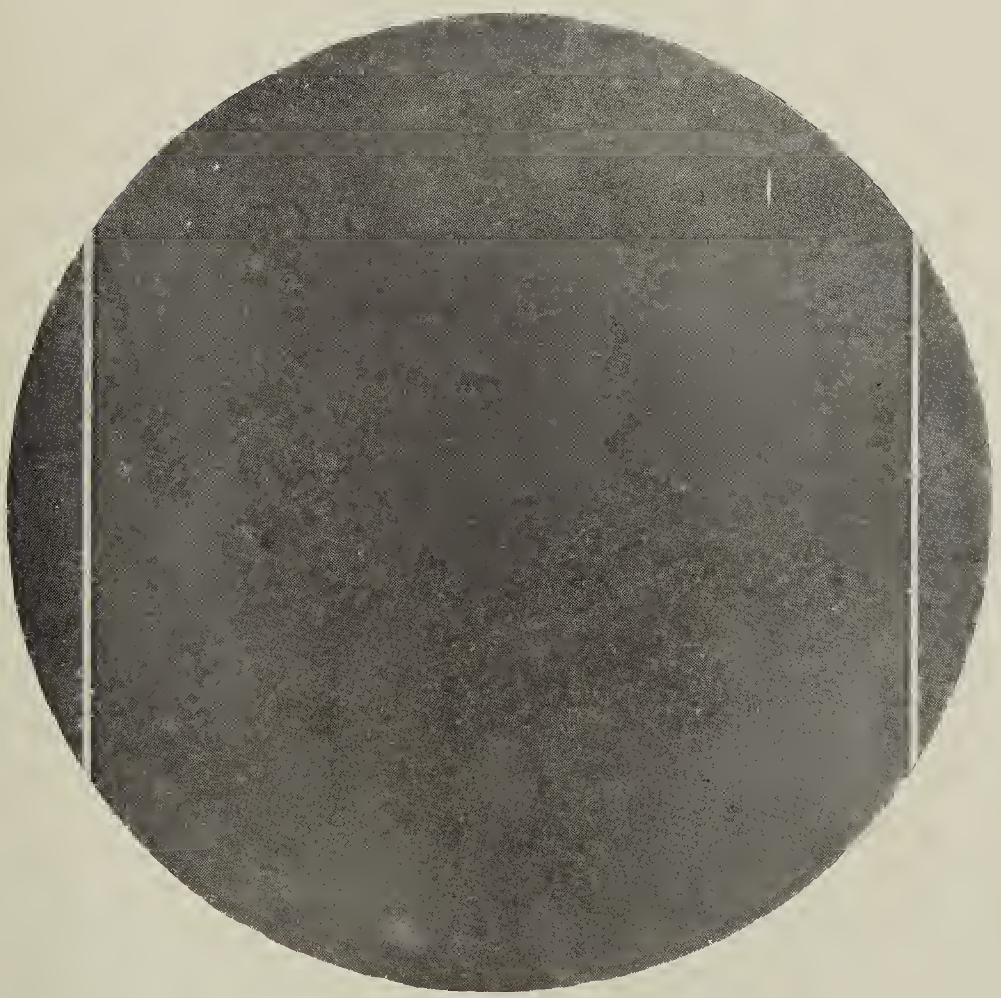
PONTIAN RESERVOIR VALVE TOWER, 10-10-39.
Numerous Eremosphaera, Ankistrodesmus and Staurastrum.



GUNONG PULAI CLEAR WATER TANK, 10-10-39.
Fine amorphous matter No algae.



McRITCHIE RESERVOIR VALVE TOWER, 11-10-39.
Eremosphaera, a few Staurastrum, ankistrodesmus and cosmaria.



TAP WATER ON 10-10-39.
One Staurastrum only to be seen. The white lines are the edges of a glass plate through which the photograph was taken.

MUNICIPAL HEALTH OFFICE,

Singapore, 15th February, 1940.

The Municipal Health Officer,

Singapore.

Sir,

I have the honour to submit the following report of the work done in the Supervision of Midwives and Infant Welfare Department during the year 1939.

NEW BABIES.

During the year, 21,512 new babies were taken on the Clinic Registers, i.e. 1,481 more than in 1938, and this figure represents 84.23% of the total births for the year, compared with 88,209% in 1938.

INFANT WELFARE CLINICS.

In 1939 there were 51,640 consultations held in the Clinics which were 46 less than in the previous year.

While the number of infants attending the Kreta Ayer Clinic is still slightly greater than those at Prinsep Street Clinic, there is a marked increase in the numbers attending Joo Chiat Clinic, and it is more than gratifying to see that the greatest increase at this Clinic is among the Malays, who are beginning to realise the advantages of our advice regarding the care and of feeding of their infants.

The number of cases sent to Hospital from the Clinics during 1939 was 1,547, an increase of 56 compared with 1938. Of these cases, there were 559 sent for admission and 988 for treatment as out-patients.

It is still only too often that the parents wait to bring their infants to us when they have been ill for some time, and it is difficult to get them to understand that the sooner they come the more certain is the cure.

They still seem to look upon Hospital treatment as a "last resource" and time and time again they will rush to the Hospital, or to our Clinics with a moribund infant, so near to death that resuscitation is almost hopeless.

We do our utmost to instil into the minds of all parents that "the longer the baby is ill, the longer will it take to get better," and the sooner it is seen by a trained nurse or a Doctor the better, and we do find that there is a steady increase in the number of parents who have listened to us, but the numbers of dying babies taken to Hospital is still a very distressing feature.

INFANTILE MORTALITY RATE.

The Infantile Mortality Rate for 1938 was 177.4 per 1,000 live births; for 1939 it shows a decrease of not less than 30 per 1,000 live births, i.e. 147·7per 1,000.

The previous lowest Infantile Mortality Rate on record for the Municipality was 171.2 per 1,000 live births in 1935.

Analysis of the figures for the chief causes of infantile deaths gives some interesting results:—

TABLE 1.

	1938 Rates per 1,000 live births.	1939 Rates per 1,000 live births.
Convulsions	35.693	30.544
Bronchitis & Pneumonia ..	39.887	28.273
Diseases of Early Infancy ..	30.157	32.071
Diarrhoea & Enteritis	24.914	18.640
Tetanus Neonatorum	6.962	6.853
Beri-beri	15.099	9.320
Congenital Syphilis	6.333	5.678

These figures leave a "residue" of only 16.~~0~~321 per 1,000 live births from "other causes" as compared to 19.075 per 1,000 live births in 1938.

Analysis of the figures of the Infantile Mortality Rate for 1939, by nationalities, also give some illuminating results:—

TABLE 2.

	1938 Rates per 1,000 live births.	1939 Rates per 1,000 live births.
Chinese	178.9	150.3
Malays	235.6	188.4
Indians	128.9	91.6

In Table 1 it will be seen that there are very substantial decreases in the figures for:—Convulsions, Bronchitis and Pneumonia, Diarrhoea and Enteritis, and Beri-beri.

In previous reports I have stressed the fact that it is more than possible that a large number of the infantile deaths reported as due to convulsions are in fact, due to beri-beri, and it is quite likely that this is still the case to a great extent; it must be remembered that many of these infants will be seen "in extremis" or after death, when only the obvious sign in the moribund will be the convulsive state, and in the dead, there will be only the history as given by the parents, to whom the symptoms of convulsions will be the most apparent.

It is obvious then, that this nomenclature "convulsions" covers a multitude of conditions, and as the incidence of acute cardiac beri-beri among infants is so high, I am sure that many cases come under this heading.

As regards bronchitis and pneumonia, it is a recognised fact that lack of vitamins will predispose to the occurrence of these diseases, and I hope that at least to some extent, the improvement in the diets of some infants under our care, together with the exhibition of vitamins A, B, C and D in cases who have come to the Clinics, can be held responsible for the decrease in these diseases as the causes of infantile deaths.

With reference to beri-beri itself, it is extremely gratifying to see that there has been a decline in the numbers of infants dying from this disease, and there again, although I do not claim that it is entirely due to the Ante-natal teaching and advice, or to the advice in the Infant Welfare Clinics, I do feel that this teaching and advice has to some measure helped to bring about this improvement.

Diarrhoea and enteritis too, shows a marked decrease, and here again I trust that I might at least suggest that this decline is in good part due to the fact that we have in the past year had still more success in our endeavours to re-instate breast-feeding among the mothers, with the resulting falling off of the diseases of diarrhoea and enteritis which in practically all cases can be traced directly to artificial feeding, where dirty and insanitary methods of feeding have been employed.

Tetanus Neonatorum shows very little improvement, and as always, careful investigations have been made as to the conditions under which the births of these babies took place, and in every instance, the mother had no skilled attention at her confinement.

The actual fact of not having skilled attention at the confinement does not necessarily mean that Tetanus Neonatorum is inevitable in all such cases, but it should be realised that the dangers are great, as there is no midwife in attendance to apply the correct sterile dressing to the newly-cut umbilical cord, so that the parents are not prevented from using the time-honoured and invariably filthy preparations which their customs decree should be applied.

Until we are able to wipe out the occurrence of all cases of women having no skilled attention at confinement, which is, of course, the ideal at which to aim, or alternatively, until we are able to educate all these women against the use of these home-made preparations, we shall never be able to eliminate the occurrence of this disease which causes such a high percentage of fatalities among the newly-born.

In Table 2, I would draw attention to the large decrease in the incidence of infantile deaths among the Malays.

I feel that I have some justification in saying that this is due in a great part to the increasing effect of our teaching and advice to these mothers, but it should be remembered that the Malay population, compared to the Chinese, is very small; this holds good far more in the case of the Indians.

INFANT FEEDING.

I have laid stress on the fact that infant feeding is one of the greatest problems which we in the Infant Welfare Department have to face, in all my Annual Reports, and have always emphasized that we are doing our utmost to suppress artificial feeding and to "re-introduce" breast feeding among the mothers seen by us.

The incidence of artificial feeding is definitely declining year by year, and this was again the case in 1939.

It is obvious that we can never attain the ideal of all mothers breast feeding their infants (omitting of course, cases of illness where it is contra-indicated), as so many of these women have to go out to daily work, leaving their babies behind, that it is a physical impossibility for them to do so, however much they may wish, but still more of these mothers are realising that even a breast feed in the morning before they leave for work and another at night when they return, does them and the infant far more good than entire artificial feeding.

It is quite useless to try to teach the mothers complementary feeding, as it is done at Home, the whole process is far too difficult and complicated for them to grasp.

Further, in cases where the supply of breast milk is failing or inadequate, it is utterly useless to give the mother tinned milk with the instructions that she take it herself, to augment the breast milk, she will invariably give it to the baby in a bottle; it is therefore, in these cases, that we habitually give the mother a preparation which we know will increase the flow of her milk, and which is of such a nature that she will not give it to the infant, and in addition to supplying her with this preparation, we also teach and advise her as to the best diet, according to her means, that she can take, to help as well; in this connexion I would like to point out that we have had a good deal of success with the use of banana flour, when the mothers have been able to obtain it, and afford it.

As in previous years, where there is a real shortage of breast milk, and all attempts to increase the flow have failed, and if the infant is over three months old, rather than put it on nothing but artificial feeds, i.e. tinned milk, we advise the mothers to breast feed their infants say, once or twice a day, according to how much they can manage, and they are advised to give the infants very thin gruel made from chawbee flour, at other stated times, increasing the numbers and strengths of these feeds as necessary.

As the infant grows, we advise bean curd, chopped-up liver, spinach, fresh fish (with good bean sauce), in the chawbee gruel, etc., etc.

We find that babies fed on such a diet thrive very well, and thus we are able to eliminate the incidence of infantile beri-beri in these cases.

The mothers have taken to this advice regarding the use of the chawbee gruel very well, and greater numbers are trying to give it.

We have also found that thin chawbee gruel, given in proper quantity and at proper intervals, seems to agree admirably with small premature or marasmic babies, where idiopathic diarrhoea seems to be the constant complaint.

The only difficulty we have in advising this diet is the fact that it is very difficult for a good many of the mothers to get the chawbee pounded; those living in certain areas, especially more on the borders of the town, are able to get it ground at Indian shops, but those in Chinatown are handicapped.

It will thus be seen that, provided the mothers are advised in a manner which shows that we realise their difficulties, as regards finance, etc., the great majority are indeed anxious to do as we suggest for their infants, but there are still a certain number who will *not* breast feed their babies under any circumstances whatever, and how ever much we may try to persuade them.

I must confess that some of the excuses offered for this refusal take a lot of understanding, and I do not pretend to be able to follow the line of argument that so many of these mothers take up, when they say that bottle feeding is so much easier than breast feeding.

Some people would try to persuade me that this refusal is nothing but laziness, but that again, I find difficult to believe, surely it is more "work" to prepare a bottle feed every few hours?

MALAY ATTENDANCES AT THE INFANT WELFARE CLINICS.

The Malay mothers are continuing to come to the Clinics in increasing numbers, and are definitely taking more heed to our advice and teaching than hitherto.

HEALTH VISITORS.

The number of house-to-house visits paid by the Health Visitors during the year 1939 was 125,069—an increase of 1,406 over the number paid in 1938.

In my report for 1938, I drew attention to the enormous number of visits each of the nurses had to pay, and said that we should have to re-arrange the work in some way to cope with it; the appointment of three more Health Visitors has been approved and they will be commencing work early in 1940.

SUPERVISION OF MIDWIVES.

As pointed out in my report for 1938, re-organisation of the work of the District Staff Nurses engaged in the duties of Supervision of Midwives was considered necessary, so as to allow them more time for re-visiting sick mothers.

Figures show that we were fully justified in taking this step.

In 1939, there were 26,149 births reported to the Supervision of Midwives branch of the department, (these included 136 pairs of twins), and the total figure shows an increase of 1,771 compared with that for 1938.

Of the 26,013 mothers whose confinements had been reported to the Clinics during 1939, the District Staff Nurses saw 17,966 while 30 had died, and 75 had removed within the first ten days after confinement.

Of the 26,149 births reported to the Clinics in 1939, 17,422 infants were seen by the District Staff Nurses within the first ten days after birth, while there were 287 stillbirths, and 244 infants had died in that period after their birth; 594 infants had removed during this period, or were "nursed out" or were sick in Hospital.

Of the 17,422 infants seen, 13,604 or 79.23% were breast fed, while 3,069 were artificially fed, and 747 were partly breast and bottle fed.

The total number of visits to the homes of newly confined mothers, paid by the District Staff Nurses in 1939 was 32,206 compared with 32,367 in 1938.

These nurses paid 17,998 visits to newly confined mothers and in addition 1,479 visits were paid seeking 772 wrong addresses while 12,703 re-visits were paid to 3,041 sick mothers; cases of mothers recently confined, and the births reported to the Clinics but being untraced by the Staff Nurses numbered 396, compared to 354 in 1938.

The number of mothers confined in Hospital during 1939 and reported to the Clinics was 7,562 an increase of 555 compared with the figures for 1938; 12,886 were attended in their own homes by Registered Midwives, and 396 were attended by Private Doctors, and in addition, 5,159 mothers had no skilled attention at their confinements.

Of the 17,966 mothers seen by the District Staff Nurses during 1939, 14,709 or 81.25% were found to be living in cubicles or single rooms, as compared with 80.55% in 1938.

Maternal deaths for the total number of confined mothers during 1939 amounted to 103, compared with 131 in 1938, and the principal causes were as follows:—

	1938	1939
Abortion	3	4
Ectopic Gestation	4	1
Other accidents of pregnancy ..	4	3
Puerperal Haemorrhage ..	50	37
Puerperal Sepsis	29	16
Puerperal Albuminuria and Convulsions	18	19
Toxaemias of Pregnancy ..	5	3
Pulmonary Embolism	1	—
Other Accidents of Childbirth ..	9	6
Puerperal Insanity	1	—
Childbirth "unqualified" ..	7	14
	131	103

In my annual report for 1938, I laid special stress on the occurrence of cases of mothers having no skilled attention at their confinements, and expressed the hope that at some not too remote future date, the possibility of the establishment of Resident Municipal Midwives in the localities where these cases most frequently occurred, might be given serious consideration.

These cases are not decreasing in number, and I can only repeat what I have said previously, regarding my anxiety at such a state of affairs, and to express my earnest hope that it will be possible to at least attempt to rectify this at the earliest opportunity.

MUNICIPAL MIDWIVES.

The total number of poor cases attended by the Resident Municipal Midwives during the year 1939 was 1,847, a decrease of 295 compared with the figures for 1938.

This figure may appear to be disappointing at first, but I think that it can be explained in a great measure to the increase in cases going to Hospital for their confinements.

The cases attended by the Midwives comprised 651 confinements, 1,192 post-natal cases, and in addition these Midwives attended 7 cases who had to be sent to Hospital.

PUERPERAL SEPSIS.

During the year 1939 there were 19 cases of puerperal sepsis (of whom 16 died) reported to the Department, compared with 31 in 1938.

These cases were, as usual, all investigated by the Superintendent of Midwives and in many it was found that the mothers had had no skilled attention at confinement.

"PANEL DOCTORS."

In 1939 there were 61 cases of complicated labour in poor mothers, to whom the Private Practitioners in the special Municipal "Panel" for dealing with such cases, were called by Registered Midwives; this figure shows a decrease of 17 as compared with that for 1938.

TETANUS NEONATORUM.

In 1939 there were 83 cases reported to me of Tetanus of the newly-born, compared with 79 cases in 1938.

As always, these reports were investigated by the Superintendent of Midwives and every case was found to be one of "no skilled attention at confinement."

When discussing the returns for infantile mortality during 1939, under the heading of "Chief Causes of Death," I said that it seems impossible to hope that we can ever eradicate this disease until either we have no more mothers who have "no skilled attention at confinement" or the mothers give up the practice of using home-made and filthy preparations for application to the newly divided umbilical cords, and here again, I feel that I have a strong reason for hoping that before long we shall be able to have Resident Municipal Midwives in the areas of the town where these cases most often occur.

VENEREAL DISEASES.

My remarks on this subject are becoming stereotyped, as year by year I have to report that there is "no appreciable change in the incidence of maternal and infantile Syphilis."

Admittedly, the deaths from Congenital Syphilis show a decrease in the past year, but it is so small as to be scarcely worth commenting upon.

Again, it has to be admitted that there is an increase in the number of mothers who are attending the Ante-natal Clinics and are receiving treatment against Syphilis, but unfortunately many of them still tend to come to the Clinics for the first time so far advanced in pregnancy, that it is too late to hope that they can give birth to a healthy child.

I cannot alter my remarks on the position as regards the incidence of Gonorrhoea any more than I have been able to do so regarding the incidence of Syphilis in the mothers and babies.

DIET DEFICIENCIES.

Year by year, in my annual reports, as other problems with which we have to deal yield to our advice and teaching, so have I laid more and more stress on the subject of diet deficiencies among the mothers and infants under our care.

At long last our constant "hammering into" the mothers of the vital importance of their taking the diets we recommend as a safeguard against lack of vitamins and mineral salts seems to be bearing fruit, but we still have a long way to go before we can say that the mjority heed our words.

Prejudice, deep-rooted customs and superstitions, all have to be overcome by us, and it is hard work indeed; added to this is the very marked dislike of many mothers for the unpolished variety of rice which we urge them to take and to give to their infants (when old enough), and the not inconsiderable difficulty some of the mothers experience in obtaining that kind of rice.

In any report I submit, I shall never be able to lay too much stress upon the gravity of the amount of maternal and infantile beri-beri existing in the town, but I would point out that, in the face of the overwhelming incidence of the disease, it must never be forgotten that the consumption of the polished rice brings other ills, not only is the rice thus treated deprived of the all-important vitamin B complex, but also of the equally important mineral salts, such as iron, calcium, etc., and these deficiencies are, in my opinion, the cause, to a very great extent of the large number of cases seen both in mothers and infants of anaemia, faulty teeth, etc.

Our efforts in attempting to combat these deficiency diseases never slacken—in fact, if possible, they are more strong than ever—and we still continue to give all parents the most careful tuition in the types of food they should buy, and where, through poverty, it is impossible for the mothers to obtain all that we suggest, we continue to provide them with specially chosen supplements.

ANTE-NATAL CLINICS.

The Assistant Lady Medical Officer, Dr. Mary Tan, who is in charge of this branch of the Infant Welfare Department, has handed me the following report, which I submit for inclusion in my own:—

"During 1939 1,057 new cases were taken on the books, which is an increase of 256 compared with the figure for 1938, the year when these Clinics were first started.

Clinic consultations with these mothers amounted to 4,614 an increase of 1,654 compared with those in 1938, while the visits paid to the mothers in their homes by the Health Visitor who is attached to this branch, amounted to 3,529 in 1939, nearly double those paid in 1938, when the figure was 1,799.

Of these 1,057 mothers, 104 were sent to Hospital for treatment, 60 as In-patients, and 44 as Out-patients.

Anti-syphilitic treatment has been carried out on a larger scale than in 1938, 141 mothers being given injections as well as treatment by mouth, as compared with 95 mothers having 716 injections in 1938.

Anti-beri beri treatment has also been carried out, and the mothers are taught all types of foods which will prevent their developing beri-beri during or after pregnancy.

Every pregnant mother is advised among other things, to breast feed her infant and to take chawbee at all times.

If, in the later stages of pregnancy, there are any signs of a possible insufficiency of breast milk, the mothers are advised to take daily, if possible, soup made of white bean curd, and/or fresh fish, fresh green vegetables, papaya with or without meat, according to the patient's means.

"Junket" made of bean curd can be bought at 1 or 2 cents per bowl, and this, together with liver, beef (if the mother will take it), and beans of all kinds are encouraged.

The mothers are inclined, through superstition, to believe that during the month before and after confinement they must take only dried fatless foodstuffs, consequently we see beri-beri in various stages developing in these post-natal cases early in the first fortnight of delivery.

The infant, having deprived its mother (in utero) of her already poor supply of vitamin B somehow manages, as a rule, to get along fairly well until about the 6th—8th week of extra-uterine life, when it begins to show active signs of beri-beri.

If through years of repeated teaching, the mothers could be made to drop their superstitions and also to acquire a taste for chawbee, then beri-beri could be wiped out.

Mothers are taught by us how to cook the chawbee in a manner which will disguise the flavour.

Owing to the custom of taking white rice we find that the mothers are most unwilling to take the chawbee; when asked repeatedly, they invariably say that they are eating it, and even produce a little sample of the rice, but that is about all the chawbee there is in the house, as inspection of the mother's kitchen proves.

Often we find beri-beri in breast fed infants where the mothers are genuinely taking chawbee.

In such cases, investigation shows that the mothers are so poor that they cannot afford to buy meat or other nourishing food—they live on plain boiled rice, with boiled vegetables, bean curd and occasionally fish, as they can afford.

This, to my mind, shows that there are other factors, such as other vitamin deficiencies, which are associated with beri-beri.

Then again, when the patients are willing to take chawbee, those living in the congested areas in particular, find difficulty in obtaining it from the shops, and very often the only variety obtainable is frank "chicken food," full of padi, small stones, grit, etc., and quite unfit for human consumption."

I should like to add one or two remarks to the above report by the Assistant Lady Medical Officer.

Dr. Tan says in the last paragraph but one, that "there are other factors, such as other vitamin deficiencies, that are associated with beri-beri."

Beri-beri is certainly the outstanding deficiency disease seen by us, but there is definite evidence, (proved by Professor Rosedale, that there are other factors lost in the polishing of rice), and among others, there are symptoms resembling latent scurvy sometimes seen among the mothers and infants.

If I may be permitted to express an opinion, I think that there are conditions closely associated with the deficiency of the vitamin B complex, to a far greater degree than is generally realised, owing to the fact that the actual beri-beri symptoms overshadow any others.

Again, as I have pointed out in previous reports, there is a serious loss of important mineral salts, when rice undergoes the process of polishing, including iron, calcium, etc., and it is very obvious that there is this deficiency, when one sees the large numbers of mothers, both before and after the birth of their infants, suffering from anaemia, often of a marked degree; this anaemia is also seen in many infants, and is attributable to the same cause, (a) pre-natally, and (b) post-natally, during the period of breast feeding, and to a certain extent as a more remote result in later bottle feeding, if the condition has not been seen and treated.

It should be remembered in this connexion that the very restricted diets of most of these mothers both before, and after confinement (usually for 40 days before and after that event) are depriving them and their off-spring of other sources of these mineral salts, which would be absorbed if fresh vegetables, etc., were consumed, and that this restriction also aggravates the symptoms of the beri-beri, etc., caused by the lack of the vitamin B complex and other factors in the polished rice.

Another important consideration is the fact that the mothers who still adhere to this ancient belief regarding the eating of only salted fish and salt rice as described above practically always are the ones we find still adhere to yet another custom which is depriving them of essential factors, i.e., they believe that they must not leave their room or cubicle for at least 40 days after the birth of the child, so that, added to the restricted diet, they are, in a high percentage of cases, living in small dark rooms, thus being deprived of the light and air which is so necessary to them.

Time and again I have seen a pale woman at the clinic, with obvious signs of beri-beri and anaemia, and on enquiry, I find that she has not come to the Clinic before, for advice and treatment, "because the 40 days were not up." This can easily be seen to be another difficulty we are up against, in our endeavours to get the mothers to live healthy lives.

Further, even when the mothers return to what they consider their "normal" diet, they are not making up for the deficiency in the polished rice, by any means, and this also holds good for the foodstuffs they usually give their infants when they are being weaned and after.

In my report for 1938, I stressed the importance; and the seriousness, of the high percentage of hook ~~tape~~ and round-worm infections found in the mothers attending the Ante-natal Clinics, especially at Joo Chiat Clinic.

The presence of these parasites depletes the already scanty and deficient food supply, and also causes a still more profound anaemia.

We have endeavoured to get as many of these mothers as possible to go to Hospital for treatment, but they are usually very difficult to persuade, pleading inability to leave the other children and their husbands to "fend for themselves" etc; it should also be remembered that in the case of a pregnant woman the treatment of a serious worm infection cannot be undertaken lightly in view of the possible results to the pregnancy.

The Assistant Lady Medical Officer agrees with me that there is evidence in a limited number of cases in the Ante-natal Clinics that there is a certain amount of vitamin A deficiency among these mothers, as evidenced by the existence of "sore mouth of pregnancy."

The shortage of vitamin C may, too, lead to complications, and considering that the mothers are without sources of this vitamin for a more or less fixed period, before and after the birth of the child, I am rather surprised that we do not see more evidence in them of this deficiency.

Dental trouble is only too prevalent among these mothers, and this is possibly due to some extent to the deficiency of calcium and vitamin D in their diets, but also in part to the prevailing state of the teeth in these women.

Both Dr. Tan and I have observed a few cases of tetany in the new born, due to the deficiency of calcium and vitamin D in the food supply of the mother, and the exhibition of calcium salts and the appropriate vitamin has quickly cured the condition, and, provided the mother takes our advice as to the suitable diet for her to take, there is no sign of recurrence.

Up to the present, the ante-natal work has had to be carried on in the same part of the three clinics as the infant welfare sessions, and as the work is increasing so rapidly, it was decided that extensive alterations would have to be made at all three clinics, to make it possible to have Ante-natal sessions held under more suitable and "workable" conditions.

Plans were passed for enlarging Joo Chiat Clinic, and for alterations to Kreta Ayer and Prinsep Street Clinics, and it is hoped that these will be put into effect early in 1940.

IMMUNISATION AGAINST DIPHTHERIA.

In my report for 1938 I stated that it had been decided, as a result of the investigations and Schick-testing of infants, to institute a special branch of the Infant Welfare Department for the voluntary immunisation of infants of 1 year of age against diptheria.

This work was commenced in March 1939, and the response to the offer of immunisation has exceeded all our expectations.

Six years ago, it was only with the greatest difficulty and a tremendous amount of persuasion, that we could get a mother to consent to an injection of any form, either for herself or for her infant, but within the last year or so, for some reason which I do not attempt to explain, the general tendency among these people has veered round to the idea that any "medicine" given by injection is better than the same given by mouth; this change in point of view has been noted and told to me by other workers among the poorer classes in Singapore.

At the third weekly session after commencing the work at one of the Clinics, I had three mothers bring their infants of 1 year of age and children up to 5 years of age, and they begged me to give the older children the "medicine" as well.

In view of this altogether unexpected desire on the part of parents to have their older children immunised, I asked for and obtained, permission to do any child up to 3 years of age, whose parents wished.

Since then, I have had many of these older children come for immunisation, and it has been my experience to have them brought up to 15 years of age!

While wishing to do all I can to foster this desire to take advantage of our free immunisation, I have had to explain carefully to the parents that I cannot give any "medicine" to children over 3 years of age—reassuring them that the danger of older children catching the disease is remote compared to that run by their young brothers and sisters—but in some exceptional cases I have given injections to a few children up to 5 years of age, and in 3 cases of direct "contacts," injections were given to children of 7, 9 and 11 years of age with no ill effects.

Another aspect of this voluntary collaboration has been the attitude of the grandmothers, who as a rule have been more obstructive and antagonistic to "New-Fangled Western methods" than otherwise, and have more often than not, been unwilling that their daughters, (or daughters-in-law) and their grandchildren should have treatment from us.

It is now quite an everyday occurrence for these grandmothers to bring the infants, and very frequently to bring older children as well.

It was decided that we would offer immunisation to the parents living in the most congested districts in both the Kreta Ayer Clinic and Prinsep Street Clinic areas of the town, before we undertook to offer it to the parents, for their infants in all the 12 districts into which the town is divided for the purpose of Health Visiting.

It was also arranged that the Health Visitors in these crowded districts should offer free immunisation for infants of 1 year old, when they paid their last visits to the infants of that age.

Special identification cards were printed, bearing the name of the Clinic serving the area where the child lived, the child's Clinic card Serial Number, and the name and address.

These cards were given to all parents of 1 year old infants by the Health Visitors at the "one year old" visit, and the parents instructed to take it with them to the Clinic when they went for their infant to be immunised.

When the infant attends for the first injection, a second card (as below)

Municipal Health Officer, Serial No.......

Singapore. INFANT WELFARE DEPARTMENT,

........................Clinic.

ANTI-DIPHTHERIA IMMUNISATION.

1st injection 0.2cc. A.P.T. ....

2nd ,, 0.5cc. ,, ...

This is to certify that........................son/daughter of

........................has received two immunising doses of A.P.T.

against Diphtheria. Age..................

....

Date.......................... Lady Medical Officer.

is filled in, with the date of the first dose, and filed for future reference; at the second visit this is completed, and signed by me, and the parent is told that the card is "as important as the birth certificate" and must be kept as carefully, and that if ever the child has a sore throat, and is seen by a Doctor or Hospital, they *must* show the card, this last precaution being taken in case the child might have suspicious signs suggesting diphtheria.

The idea originally, had been to work on the basis described above, in the limited number of districts, for the first 6 months of the scheme, and then, if the parents were responding well to the offer of free immunisation, to extend the field of operation to all 12 districts, and towards that end I had 10,000 pamphlets printed in English, Chinese and Malay for distribution, hoping that these would add to the numbers coming through the persuasion of the Health Visitors, but unfortunately, up to the present, it has not been possible to extend the work, owing to the difficulties in obtaining regular supplies of the "A.P.T." (Alum precipitated Toxoid) which we use, and it has therefore been thought best, under prevailing conditions, to continue to limit our activities to the crowded areas, until such time as it is possible to increase the work as we desire.

The method adopted by us, after careful consideration of all the latest literature and information on the subject, was the "two shot method," i.e. a dose of 0.2 c. cm. of "A.P.T." was given at the first visit, and 28 days later the second dose of 0.5 c. cm.

The 28-day interval was recommended in the very latest works that we had to hand at the time that the scheme was commenced, but later literature on the subject suggested that a 6-week interval was the best; on this assumption, therefore, it was decided that any parent who had not brought their child at the 28th day for its "2nd shot," should be visited by one of the Health Visitors specially attached to this branch of the Infant Welfare Department, the reason for their absence enquired into, and that the parent should be persuaded to attend the next session, and that the "2nd shot" should be given to these parents attending up to the end of the 6th week.

Since then, and only within a very few weeks of writing this, further reports of research on the subject state that an interval of from 1—3 months between "shots" is quite permissible, in fact the longer the interval between injections the more immunity will be acquired.

We have found from experience, already, that the people among whom we are working, find it difficult to remember to come to the Clinics after a period longer than 28 days i.e. they seem to be able to count and remember from one phase of the moon to the next similar phase (as the vast majority reckon this way) so that the question of extending the interval between injections out here is rather complicated, as it would mean that the Health Visitors attached to this branch would have to pay probably several visits to the homes of the children, instead of the one visit they pay at present in such cases, (which is in addition to one visit per parent who has not come for the first injection, after having been visited by the "regular" Health Visitors at the 1 year old visit); this would mean a big increase in the number of visits the two "special" Health Visitors would have to pay, and this would not be possible with the present staff.

Again, the number of sessions for immunisation against diphtheria, was at first only one per week at each Clinic, but very soon it was necessary to increase the sessions to two per week at Prinsep Street Clinic, and it is obvious that we shall soon have to have three sessions weekly at that Clinic and at least one more weekly at Kreta Ayer Clinic, as the numbers attending at both centres are getting so high.

The response to the offer of free immunisation has been very variable in the two Clinic areas mentioned, and I would hasten to explain that it is no reflection whatever on the "persuasive" powers of the Health Visitors, as it has not been the same nurse on the same District all the time, but a change was made on more than one occasion, to eliminate any such possibility of a personal factor coming into the question.

The following tables will show the discrepancy between the results of the two Clinics, and it is one which frankly, I find difficult to explain, but would suggest that possibly the class of patients in the Prinsep Street area are more "enlightened" than at Kreta Ayer, and may not come under the influence of their orthodox compatriots to the same degree as in the Kreta Ayer area, further, the numbers of mothers who go out to daily work, at godowns, factories, etc., in the Kreta Ayer area is appreciably greater than at the Prinsep Street side of the town, and again, the population on the Kreta Ayer side is far more fluctuating, with many of the inhabitants of that part of the town moving about from place to place at frequent intervals.

However, disappointing as the figures have been for the work in the Kreta Ayer Clinic for the first 9 months of the scheme, figures at the time of writing this report show that there is a steady increase in attendances and that the parents are returning in greater numbers for the "2nd shot" to be given to their infants.

In view of the fact that there is a general increase in the work of the department, but more particularly because of the increase in the work of the Ante-natal branch and in the Immunisation against Diphtheria work, the appointment of a Junior Assistant Lady Medical Officer was approved and it is hoped that one will be appointed early in 1940.

TABLE 1.

Number of cases offered immunisation at "1 year old visit."

	Prinsep Street Clinic.	Kreta Ayer Clinic.
Total offered	2,287	2,520
Refused	366	764
Sick or removed	217	229
Percentage of Refusals	15.56%	30.31%

TABLE 2.

Number of injections according to age.
Prinsep Street Clinic.

	"1st shot."	"2nd shot." (full course).
1 year old	1,704	1,619 = 95.01%
1—2 years	595	529 = 87.22%
2—3 years	599	553 = 92.32%
3—5 years	34	33 = 97.58%
Total . .	2,932	2,734 = 93.24%

Total Injections = 5,666.

Kreta Ayer Clinic.

	"1st shot."	"nd shot." (full course).
1 year old	765	631 = 82.93%
1—2 years	69	62 = 89.85%
2—3 years	133	108 = 81.203%
5—11 years	17	17 = 100%
Total ..	984	818 = 83.23%

Total Injections = 1,802.

TABLE 3.

Number of injections according to nationality.

Prinsep Street Clinic.

	"1st shot."	"2nd shot" (full course).
Chinese	2,730	2,578 = 43.43%
Malays	49	35 = 71.46%
Indians	68	49 = 62.05%
Japanese	54	44 = 81.48%
Others	31	28 = 90.31%
Total ..	2,932	2.734 = 93.24%

Total Injections = 5,666.

Kreta Ayer Clinic.

	"1st shot."	"2nd shot" (full course).
Chinese	945	786 = 83.17%
Malays	6	4 = 66.6%
Indians	31	26 = 83.86%
Japanese	—	—
Others	2	2 = 100%
Total ..	984	818 = 83.23%

Total Injections = 1,802.

It is noteworthy that there have been only three cases of reaction to "A.P.T." (alum precipitated toxoid) out of 3,916 1st injections; of these two were only very slight, the reactions being localised to the site of injection, and they were small, hard and red, very slightly painful nodules, while in the third case, the reaction started in the same way, but ended as a small localised abscess (with no involvement of lymphatic glands) and I have a strong suspicion that this occurred because of scratching on the part of the infant, and the application of a dirty rag "dressing" by the parent. There were no reactions at all among the 3,552 second injections, therefore we had only 3 mild reactions in 7,468 injections.

I have taken particular care to follow up all cases of diphtheria reported by the Middleton Hospital, in children between the ages of 1-5 years, having the possibility in view that some may have had one or two injections of "A.P.T." at the Clinics; it is extremely interesting to be able to record that not one of these children had had one, let alone both, injections; this has been confirmed by the M.O. in charge of the Hospital.

In view of the general increase in the work of the Department, and in particular because of the Immunisation against Diphtheria branch having been put on a permanent footing, instead of temporary as it was to commence with, the appointment of a Junior Assistant Lady Medical Officer has been approved, and it is hoped that one will be appointed early in 1940.

CHARITABLE ORGANISATIONS.

Once again, may I take this opportunity of expressing my deep appreciation of all the practical help extended to the large number of necessitous cases we have referred to the Salvation Army and the Silver Jubilee Fund during 1939, and also to the Child Welfare Society for their co-operation with the Municipal Infant Welfare Department in their care of yet more "Municipal Babies" at their two Creches, and for their valuable collaboration with the Immunisation against Diphtheria branch, in offering immunisation to the parents of infants attending the creches, on our behalf, and sending these 53 infants to the Municipal Clinics for the injections.

CHANGES OF STAFF.

Staff Nurse Ethel Lee resigned her appointment, and Health Visitor Foong Sim was promoted Staff Nurse in her place.

Nurse Dang Ong Ing was appointed Health Visitor to fill the vacancy caused by that promotion.

Nurse Lim Ah Chee and Nurse Lee Soo Moi, had been appointed in 1938 as temporary Health Visitors for the special work in connection with the Immunisation against Diphtheria branch, have been placed on the permanent staff.

Resident Municipal Midwife Lim Beng Neo resigned her appointment, and Midwife Soong Phooi Cheng was appointed to fill that vacancy.

I have the honour to be,

Sir,

Your obedient servant,

MURIEL G. E. CLARK.

Lady Medical Officer.

Middleton Hospital,

Singapore, 12th January, 1940.

The Municipal Health Officer,

Singapore.

Sir,

I have the honour to submit the report of the Middleton Hospital for the year 1939.

The following table summarises the cases treated during the year.

Disease	Remaining	Admitted	Discharged	Died	Remaining
Smallpox	—	1	1	—	—
Cholera ..	—	—	—	—	—
Plague	—	—	—	—	—
Chickenpox	26	763	772	—	17
Measles	—	108	87	17	4
Diphtheria	12	269	214	57	10
Cerebro-Spinal Fever ..	1	17	10	7	1
Erysipelas	—	2	2	—	—
Scarlet Fever ..	—	1	1	—	—
Whooping Cough ..	—	3	2	1	—
Mumps	5	133	138	—	—
Rubella	1	32	33	—	—
Observation & contacts	—	99	98	—	—
Other Diseases ..	2	80	60	22	—
Total ..	47	1,508	1,418	104	33

The number of patients admitted was 408 less than last year, but if the 238 typhoid convalescents, and 296 food hawkers who swelled the numbers last year are left out, then 126 more cases of infections disease were admitted than in 1939.

No case of cholera or plague occurred, but these was one case of small-pox.

Diphtheria. Two hundred and sixty-nine cases were admitted and 12 remained from last year making a total of 281 which is 77 more than in 1938. There were 57 deaths, a mortality of 20.3 per cent. Thirty-seven patients died within 24 hours of admission, and if these are excluded the mortality was 7.1 per cent. Eighty cases, or 28 per cent., were laryngeal or tracheal in type, and 46 required tracheotomy of whom 16 died, a mortality of 35 per cent. One of these fatal cases died on the 49th day of the disease after developing palatal, laryngeal and diaphraghmatic paralysis. Treatment in the "iron lung" presented to the Hospital by Lord Nuffield failed to save his life.

Practically every case is complicated by vitamin deficiency, and broncho-pneumonia is a serious complication of tracheotomy. To minimize these risks a preparation of vitamin B1 is given along with the anti-toxic serum and "M. & B. 693" administered as a routine. Of 40 successive cases of tracheotomy treated in this way during the last five months only 10 died and 3 of these died within 8 hours of admission. The average dose of serum per case was 30,000 units.

Eight Europeans, 10 Eurasians, 5 Indians, 220 Chinese, 7 Malays, 14 Jews and 5 Japanese were admitted. One of the Jews, 2 of the Malays, and 54 of the Chinese died.

Twenty-four cases were less than 1 year old and 13 of them died, 115 were between 1 and 5 years and 33 died, 69 were between 3 and 10 years and 9 died, 29 were between 10 and 15 years and 2 died, while 32 were above 15 years of whom none died.

Cerebro-Spinal Meningitis. Seventeen patients were admitted and 1 remained from last year making 18 altogether of whom 7 died. In the latter half of the year "M. & B. 693" was introduced as the treatment of these cases. The use of anti-meningococcal serum intrathecally was given up and lumbar puncture done only for diagnosis, and to relieve severe pressure symptoms. Prior to the introduction of this treatment 6 out of the 9 cases admitted died. After it was introduced 7 out of the 8 cases admitted recovered, and the death was that of a child aged 4 months who died 12 hours after being admitted. Three other cases of meningitis treated in the same way also recovered, but are not included as the meningococcus was not identified in films or isolated in culture.

Measles. One hundred and eight cases were treated with 17 deaths. This is a high mortality, but it must be remembered that nearly all of these cases are admitted only because they are already complicated with broncho-pneumonia, abscesses or other conditions and the evidence of measles is found in the fading rash. The desperate condition of some of the cases is evident when one considers that 10 of the 17 deaths occurred within 24 hours of admission to hospital and 7 of them within 6 hours.

Chicken-pox. As usual this accounted for about half the admissions, 763 out of 1,508. Municipal employees numbered 201, Government employees 54, Singapore Harbour Board 51, Students 97, Services 39, Police 12 and general public 309.

Other diseases: Eighty cases admitted were found to be suffering from other than notifiable infectious diseases, and 22 of them died. The causes of death were pneumonia and broncho-pneumonia 7, bronchitis 2, beri-beri 2, enteritis 2, diarrhoes 1, malaria 1, septicaemia 1, eclampsia 1, myocarditis 1, cellulitis 1, meningitis 1, acute miliary tuberculosis 1.

Nationalities and number of hospital days:—These are shown in the following table:—

NATIONALITY.	Remaining from 1938.		Admitted in 1939.	
	No.	Days in Hospital.	No.	Days in Hospital.
Europeans	—	—	51	703
Eurasians	—	—	56	812
Indians	31	257	696	9,263
Chinese	12	186	574	9,467
Malays	4	41	110	1,346
Jews	—	—	17	384
Japanese	—	—	4	134
	47	484	1,508	22,109

The following table shows the distribution of patients by employment:—

Singapore Municipal Employees	245
Government Employees	69
Singapore Harbour Employees	56
Students	191
R.A.F. Service Men, Dependants and other Employees	14
R.N. Service Men, Dependants and other Employees	57
Army Service Men, Dependants and other Employees	45
Police Force	92
General Public	739
	1,508

One hundred and seventy-eight patients lived outside the Municipal limits of whom 117 were employed in the services and 1,330 lived inside the limits.

There were 535 children admitted an increase of 14 on last year The Admissions for the last 10 years are shown below:—

Disease	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
Cholera ..	—	—	—	—	—	—	—	—	—	—
Smallpox ..	—	3	7	1	1	61	1	—	2	1
Plague ..	—	—	—	1	—	—	—	—	—	—
Chicken-pox ..	334	196	491	252	398	538	835	709	695	763
Diphtheria ..	35	46	90	159	152	115	146	170	192	269
Cerebro-Spinal Fever ..	17	6	6	3	7	11	19	15	20	17
Measles ..	60	58	7	110	58	144	181	64	112	108
Erysepelas ..	7	1	—	2	2	4	3	1	4	2
Mumps ..	10	17	22	178	149	61	388	206	187	133
Whooping Cough ..	14	20	3	8	6	3	2	1	1	3
Enteric Fever ..	1	1	1	—	—	—	1	—	238	—
Tuberculosis ..	1	1	1	3	4	—	3	—	—	—
Rubella ..	5	14	4	1	40	29	24	14	49	32
Scarlet Fever ..	—	—	—	—	2	1	—	—	1	1
Typhus Fever ..	—	—	—	—	1	—	—	—	—	—
Puerperal Fever ..	1	2	—	—	—	—	—	—	—	—
Contacts & observations	48	22	36	357	37	90	36	82	365	99
Other diseases ..	44	44	55	85	73	94	81	62	50	80
	577	431	724	1,160	930	1,151	1,670	1,324	1,916	1,508

Staff. I returned from leave on July 10th, 1939, taking over from Dr. Thurai who had acted for me.

The appointment of three nurses to the staff of the hospital having been approved by the Commissiones, Mrs. Reed, Miss Tiang Shu Wah and Miss Dexter were appointed. Miss Dexter resigned on 30.6.39 and Mrs. Reed on 12.9.39 and Miss Ling Tung Ling and Miss Dumaresque were appointed in their places. The appointment of a fourth nurse was approved during the year and Miss Wong was appointed on 20.7.39. These nurses are a valuable addition to the staff and it is difficult to understand how the hospital carried on for so many years without them.

Mr. Law resigned his post on 1.12.39 as a dresser on being appointed a vaccinator and his place has been filled by Mr. Wee Lye Seng.

Various changes occurred among the staff of ayahs, and ward attendants.

I have again to record my thanks to Prof. Hawes and Prof. Johns for their assistance and to Dr. Thurai who acted for me while I was on leave.

have the honour to be,
Sir,
Your obedient servant,
C. C. B. GILMOUR,
M.A., M.B., Ch.B:
Medical Superintendent.

Municipal Health Office,

Singapore, 16th February, 1940.

The Municipal Health Officer,

Singapore.

Sir,

I have the honour to submit my twentieth Annual Report on the Markets of Singapore, their repair and upkeep and the inspection of foodstuffs sold in them and in the town generally.

MUNICIPAL MARKETS.

There are now only nine Municipal Markets in being but there are eight private markets scattered over the town from Bukit Timah to Morse Road and Siglap to Convent Garden. These private markets are subject to Municipal Ordinance and Market Byelaws although their upkeep is the responsibility of their owners.

On Chinese New Year's Eve all markets were emptied and the whole of the buildings subjected to a thorough cleaning. A few rats were caught and killed during the operations.

REPAIRS.

Ellenborough Market: The floors and drains of the main market were repaired and regraded in January. All pork stalls were re-covered with aluminium and sixteen eating stalls had new white tiles placed on them. The tender for a new roof was cancelled at outbreak of war and has not yet been put in hand.

Telok Ayer Market: The whole of the market is being painted. Work commenced in July and is not yet finished.

Thirty concrete stalls were repaired in September and a new gate put in in November. Also eleven new chicks were supplied.

Kandang Kerbau Market: New awnings and sunshades were supplied and the collapsible gates repaired.

Orchard Road Market: The central guttering was repaired. The check balance which was found to be out of order was made good, tested and passed by the Weights and Measures Inspector.

All Markets: Repairs to water and lighting services were executed on request.

UNSOUND FOODSTUFFS.

105,018 catties (say 58 tons) of unsound foodstuffs were sent from all markets to be burnt after first spraying with Jeyes fluid.

PRICES AND QUANTITIES OF FOODSTUFFS.

There is only a slight variation in the amount of foodstuffs passing through the markets as compared with last year and the difference in total value shows an increase of $121,000 probably made up by the increased prices since war broke out.

Table A below will show that prices of staple articles have risen in nearly every case and I consider an overall rise of from 8 — 10% would be a fair estimate of the prices at the end of 1939 compared with those of 1938.

TABLE (A)

Article.	Per	1934 Av. Price	1935 Av. Price	1936 Av. Price	1937 Av. Price	1938 Av. Price	1939 Av. Price
Beef ..	Kati	.29	.36	.33	.33	.31	.38
Mutton ..	lb.	.31	.31	.35	.41	.35	.39
Pork ..	Kati	.41	.43	.42	.44	.44	.45
Tea ..	„	.85	.80 pkts. 1 lb.	.78	.84 pkt. (1 lb.)	.85 pkt. (1 lb.	.89 pkt. (1 lb.)
Coffee beans ..	„	.40	.40	.39	.35	.31	.25
Sugar ..	„	.05	.04	.04	.05	.05	.07
Salt ..	„	.02	.02	.02	.02	.02	.03
Potatoes ..	„	.05	.06	.05	.05	.06	.07
Yam ..	„	.03	.03	.03	.03	.03	.03
Onions ..	„	.05	.05	.06	.06	.06	.06
Ducks ..	Dozen	5.40	5.07	5.04	5.47	5.08	5.26
Pigeons ..	Pair	.70	.70	.65	.60	.50	.70
Eggs (hens) ..	Dozen	.30	.25	.25	.31	.31	.32
Capons ..	Kati	—	.53	.50	.52	.51	.52
Fowls ..	Each	.50	.48	.45	.49 1½ catties	.46 1½ catties	.58 1½ catties
Rice ..	Gantang	.23	.30	.28	.30	.28	.27

REVENUE (TABLE B)

Market	1934	1935	1936	1937	1938	1939
Clyde Terrace ..	$119,857.82	$132,693.97	$134,847.44	$144,193.28	$115,504.52	$117,481.04
Ellenborough ..	71,709.22	75,344.17	76,319.98	80,258.60	86,727.31	86,883.85
Telok Ayer ..	19,337.50	19,025.00	19,219.50	19,228.00	18,954.00	18,663.50
Orchard Road ..	14,105.00	14,005.00	14,421.50	15,044.00	15,245.00	15,535.50
Kandang Kerbau	17,645.00	17,948.00	18,407.00	18,842.50	19,257.00	20,244.00
Grange Road ..	1,790.00	1,818.00	2,076.50	2,086.00	2,146.00	1,603.00
Sims Avenue ..	3,742.50	3,630.00	3,663.00	3,741.00	3,734.00	3,673.50
Maxwell ..	7,407.50	8,340.00	9,116.00	9,342.50	11,151.50	11,964.50
Peoples Park ..	9,203.50	9,569.00	8,834.00	10,193.00	10,353.00	10,564.50
Joo Chiat ..	383.75	297.25	187.50	213.50	11.00 (4 months only)	Nil
	$264,181.79	$283,165.39	$287,091.92	$303,142.38	$283,083.33	$286,613.39

5% COMMISSION ON FRESH FISH SALES (TABLE C).

Market	1934	1935	1936	1937	1938	1939
Clyde Terrace ..	$ 78,719.82	$ 91,445.97	$ 94,053.94	$103,987.78	$ 74,579.52	$ 76,524.54
Ellenborough ..	35,547.72	38,827.17	39,142.98	42,747.60	48,902.81	49,126.85
Telok Ayer ..	Nil	Nil	—	—	—	—
	$114,267.54	$130,273.14	$133,196.92	$146,735.38	$123,482.33	$125,651.39

Revenue from 5% commission on wet fish sales at Clyde Terrace shows an increase of nearly $2,000 and at Ellenborough of about $200 entirely due to the better prices ruling. Stalls rents' receipts do not vary a great deal what is lost at Telok Ayer being gained at Maxwell Road Market which is becoming much more popular.

STAFFS.

There has been no increase or change in saff. 60 coolies reported sick during the year and were treated by the Medical Officer in charge of Staff.

RETURNS.

The following returns are supplied regularly:—

Weekly: Price lists to Press, Registrar General of Statistics, Food Controller and Director of Fisheries and others.

Monthly: Total catch of fish to Fisheries Officer. Average monthly price list to Registrar General of Statistics.

Quarterly: Stock of foodstuffs in markets at 7 a.m. on 1st of each quarter to Registrar General of Statistics.

Annually: Medical students and candidates for the Certificate of the Royal Sanitary Institute are conducted around the markets and given an insight in their organization.

TOWN.

239,603 cases etc. of unsound foodstuffs were sent to be destroyed as unfit for human consumption. I should estimate it at about 150 tons weight. Many tons of every kind of foodstuffs are surveyed by me during the year and consignees invariably accept my decision as to their disposal.

SAMPLES.

950 official and informal samples were sent for analysis particulars of which will be found in the Municipal Analyst's report.

I attach returns showing the approximate amount of foodstuffs passing through the markets with their approximate value, the quantity of unsound foodstuffs destroyed and a summary of vacant stalls as on 31st December, 1939.

I have the honour to be,
Sir,
Your obedient servant,
M. MacMAHON, Cert. R. San. Inst.,
Food and Market Inspector.

	Clyde Terrace No.	Ellen-borough. No.	Telok Ayer No.	Orchard Road. No.	Kandang Kerbau No.	Maxwell Road. No.	Joo Chiat Joo No.	Grange Road. No.	Peoples Park. No.	Sims Avenue. No.
Dry Goods	1	..	1	..	..	8	..	3	..	..
Beef	9	..	1	..	..	3	..	7	..	1
Salted Vegetables	..	..	..	..	..	..	..	..	..	2
Mutton	1	..	1	1	5	..	..	..	..	2
Pork	3	..	4	..	..	4	..	1	..	4
Curry Stuff	..	..	..	..	..	..	..	..	..	..
Bean cakes	..	..	1	..	..	4	..	..	..	1
Poultry	13	22	2	..	..	12	..	..	1	3
Vegetables and Fruits	21	14	33	..	..	23	..	6	..	20
Eggs	..	..	1	..	..	..	..	..	..	1
Money Changer	..	..	..	..	..	..	..	..	..	..
Eating	..	..	5	..	..	..	..	..	..	..
Fish	2	11	..	12	..	4	..	6	1	2
Shell Fish	..	..	..	..	..	..	..	..	..	..
Hawkers	..	..	..	..	..	..	..	1	..	..
Provisions	..	..	..	..	..	..	..	2	..	..
Dressed Ducks	..	..	..	..	..	3	..	..	..	..
Total ..	50	47	49	13	5	61	..	26	2	36

UNSOUND FOODSTUFFS DESTROYER DURING THE YEAR 1939.

Market.	Wetfish ctts.	Saltfish ctts.	Beef ctts.	Mutton ctts.	Pork ctts.	Vegetables ctts.	Fruits ctts.	Tinned Goods.		Bottles Preserves No.	Eggs No.	Miscella-neous.	Total Items.
								Cases.	Tins.				
Clyde Terrace ..	9,193	345	...	5	...	3,434	345	...	...	...	80	250	...
Ellenborough ..	12,163	65	...	...	...	853	20	...	...	...	1,096	4,562	...
Telok Ayer ..	...	...	...	...	...	14,087	8,073	...	...	...	1,625	...	...
Kandang Kerbau ..	57	50	...	...	18	7,888	3,386	...	...	...	2,487	21	...
Orchard Road ..	19	...	...	...	...	8,891	8,815	...	...	...	164	...	...
Maxwell Road ..	...	...	...	...	...	8,130	4,454	...	...	...	4,435	7	...
	21,432	460	...	5	18	43,283	25,093	...	...	...	9,887	4,840	105,018
Town ..	...	7,845	5,498	...	...	150,197	600	4,142	...	1,071	...	55,799	239,603
Total ..	21,432	8,305	5,498	5	18	193,480	25,693	4,142	14,451	1,071	9,887	60,639	344,621

M. MACMAHON,
Cert. R. San. Inst.,
Food and Market Inspector.

RETURN OF SOME OF THE FOODSTUFFS PASSING THROUGH MARKETS DURING YEAR 1939.

Market.	Wetfish ctts.	Boiled Fish ctts.	Shell Fish ctts.	Beef ctts.	Mutton ctts.	Pork ctts.	Fowls.	Capons	Geese	Ducks.	Pigeons.	Turkeys.	Bean Cakes ctts.	Bean Sprouts ctts.	Approximate Value	
							HEADS									
															$	cts.
Clyde Terrace ..	12,450,906	96,841	148,025	268,093	257,755	399,035	82,108	—	2,652	37,688	17,989	—	137,768	62,898	2,010,212	48
Ellenborough ..	5,388,457	—	202,159	11,129	—	830,565	56,598	1,811	2,598	86,803	1,760	—	164,067	55,880	1,371,857	21
Telok Ayer ..	39,646	—	46,890	36,661	83,269	282,490	36,507	—	917	12,688	3,543	60	—	—	213,248	82
Kandang Kerbau ..	847,332	40,377	—	178,627	276,843	409,919	50,076	—	—	14,042	—	—	38,271	43,841	559,462	45
Orchard Road ..	567,476	40,251	—	260,733	65,658	290,395	42,734	—	—	9,497	6,007	36	36,259	39,746	410,426	43
Total ..	19,293,817	177,469	397,074	755,243	683,525	2,212,404	268,023	1,811	6,167	160,718	29,299	96	376,365	202,365	4,565,207	39

M. MacMAHON,
Cert. R. San. Inst.,
Food and Market Inspector.

HEALTH DEPARTMENT.

Return of Prosecutions for Year ending 1939.

OFFENCES.		TOTAL					
		Prosecutions	Withdrawn	Not Served	Convictions	Fines	
						$	cts.
Municipal Ordinance							
Obstructions	Section 120	—	—	—	—	—	
Offensive matter flowing into Public Drain	„ 131	—	—	—	—	—	
Establishing a private market	„ 198	—	—	—	—	—	
Unlicensed Offensive Trades	„ 211	119	1	6	112	575	00
Using nightsoil/or urine as manure	„ 213	5	1	—	4	15	00
Latrine etc. notice not complied with	„ 219	1	—	—	1	--	
Nightsoil kept for more than 48 hours	„ 223	—	—	—	—	—	
Filthy premises	„ 233	106	3	1	102	535	00
Limewash notice not complied with	„ 234	18	—	—	18	20	00
Non-compliance of notice for the destruction of rats and mice	„ 235	—	—	—	—	—	
Non-compliance of notice of demolition order of insanitary dwelling	„ 236	—	—	—	—	—	
Allowing premises to be overcrowded	„ 237	—	—	—	—	—	
Non-compliance with Nuisance Notice	„ 246	36	12	—	24	40	00
Carried forward ...		285	17	7	261	1,185	00

HEALTH DEPARTMENT.

Return of Prosecutions for Year ending 1939—*(Continued)*.

OFFENCES.		TOTAL					
		Prosecutions	Withdrawn	Not Served	Convictions	Fines	
						$	Cts.
Brought forward ..		285	17	7	261	1,185	00
Non-compliance with Nuisance Order	Section 247	14	1	1	12	97	00
Non-compliance with Closing Order	,, 247	—	—	—	—	—	
Non-compliance of order for demolition of house unfit for human habitation	,, 248	—	—	—	—	—	
Non-compliance with Well Notice	,, 254	1	—	1	—	—	
Opening Well without permission	,, 254	1	—	—	1	10	00
License not exhibited	,, 381	3	—	—	3	4	00
Breaches of Offensive Trades Byelaws		14	—	—	14	87	00
Byelaws-Sections 58 & 211 M. O.							
Unlicensed Foodshops	..	388	23	26	339	1,719	50
Unlicensed Milk Vendors	..	77	3	—	74	389	00
Employing women without permission of H. O.	..	98	5	2	91	586	00
Opening licensed premises during prohibited hours ..	..	11	1	—	10	51	00
Conveying milk for sale without regulation bottles ..	..	—	—	—	—	—	
Carried forward ..		892	50	37	805	4,128	50

HEALTH DEPARTMENT.

Return of Prosecutions for Year ending 1939—*(Continued)*.

OFFENCES.		TOTAL					
		Prosecutions	Withdrawn	Not Served	Convictions	Fines	
						$	cts.
Brought forward ..		892	50	37	805	4,128	50
Failing to have name and address marked upon the vehicle/can		—	—	—	—	—	
Unlicensed Piggeries		381	13	14	354	726	50
Filthy Stables, Cowsheds etc.		1	—	1	—	—	
Breaches of the Foodshop Byelaws		236	6	2	228	1,156	50
Keeping ducks other than for private consumption		13	—	—	13	31	00
Markets and Slaughter Houses.							
Selling vegetables within 50 yards of market	Section 193	—	—	—	—	—	
Unsound Food	,, 199	1	—	—	1	20	00
Slaughtering Animals except in Abattoirs	,, 204	3	—	—	3	40	00
Market Byelaws	,, ..	106	1	2	103	364	50
Sale of Food and Drugs Ordinance							
Selling Adulterated Milk	Section 11-1	74	2	8	64	1,333	00
Selling Adulterated Whisky	,, 11-1	—	—	—	—	—	
Carried forward ...		1,707	72	64	1,571	7,800	00

HEALTH DEPARTMENT.

Return of Prosecutions for Year ending 1939—*(Continued)*.

OFFENCES.		TOTAL					
		Prosecutions	Withdrawn	Not Served	Convictions	Fines	
						$	Cts.
Brought forward ..		1,707	72	64	1,571	7,800	00
Selling Adulterated Brandy	Section 11-1	—	—	—	—	—	
Selling Adulterated Green Peas	,, 11-1	—	—	—	—	—	
Selling Milk Deficient in Fat	,, 11-1	5	1	1	3	20	00
Refusing to submit a milk sample for analysis		2	—	1	1	10	00
Q. and P. Disease Ordinance.							
Failing to report case of Inf. Disease	Section 3	—	—	—	—	—	
Moving patient without permission	,, 18	—	—	—	—	—	
Exposing patient while suffering	,, 18	—	—	—	—	—	
Conveying patient in public vehicle	,, 23	—	—	—	—	—	
Failing to have child vaccinated	,, 39-1	96	1	6	89	21	50
Failing to bring child for inspection	,, 40	—	—	—	—	—	
Registration Births and Deaths Ordinance.							
Failing to Register Births	Section 11	2	—	—	2	3	00
Carried forward ..		1,812	74	72	1,666	7,854	50

HEALTH DEPARTMENT.

Return of Prosecutions for Year ending 1939—*(Continued)*.

OFFENCES.		TOTAL					
		Prosecutions	Withdrawn	Not Served	Convictions	Fines	
						$	cts.
Brought forward ...		1,812	74	72	1,666	7,854	50
Failing to Register Deaths	Section 11-1	—	—	—	—	—	
Permitting a body to be buried without Burial Permit ..		1	—	—	1	3	00
Destruction of Mosquitos Ordinance							
Failing to comply with notice	Section 9-1	2	—	—	2	60	00
Recovery of costs of work done	„ 8-1	—	—	—	—	—	
Destroying Anti-malarial Works	„ 15	—	—	—	—	—	
		1,815	74	72	1,669	7,917	50

Summary.

Total Inspections	57,114
„ Prosecutions	1,815
„ Withdrawn	74
„ Not Served	72
„ Convictions	1,669
„ Fines	$7,917 50

H. BENJAFIELD,
Chief Sanitary Inspector.

N.B.—Costs are not included in the amount of fines.

RETURN OF NOTICES SERVED AND COMPLIED WITH ETC., DURING THE YEAR 1939.

NATURE OF NOTICES.	Brought forward from last year.	Served during the year.	Total.	Complied with during the year.	Carried forward to next year.	REMARKS.
Limewash Notice	110	1,739	1,849	1,802	42	5 Cancelled
Latrine Notice	148	196	344	220	123	1 ,,
Intimation Notice	71	337	408	272	81	55 ,,
Drain Notice	14	104	118	99	19	
Well Notice	63	61	124	53	71	
Nuisance Notice	38	111	149	87	30	32 ,,
Anti Mosquito Notice	705	152	857	739	117	1 ,,
Demolition Notice	1	1	2	2	—	
Abatement Order	1	16	17	13	4	
Mandatory Order	—	15	15	9	6	
	1,151	2,732	3,883	3,296	493	94 Cancelled

H. BENJAFIELD,

Chief Sanitary Inspector.

Return of Licences Issued under the Offensive Trade By-Laws during the year 1939.

NATURE OF LICENCE	Per Annum $	Number Issued	CASH RECEIVED $	cts.	DETAILS OF LICENCES ISSUED. For One Year	For One Month	For 2 Months	For 3 Months	For 4 Months	For 5 Months	For 6 Months	For 7 Months	For 8 Months	For 9 Months	For 10 Months	For 11 Months
Blachan Store	24	3	72	00	3	..	..	..	..	..	..	..	..	..	..	..
Brick Kiln	50	3	150	00	3	..	..	..	..	..	..	..	..	..	..	..
Dye House	12	6	72	00	6	..	..	..	..	..	..	..	..	..	..	..
Drying and Sorting Fish	12	4	48	00	4	..	..	..	..	..	..	..	..	..	..	..
Fruit Preserving	50	3	133	32	2	..	..	..	..	..	..	..	1	..	..	..
Knacker's Yard	12	..	..		..	..	..	..	..	..	..	..	..	..	..	..
Lime Making	12	..	..		..	..	..	..	..	..	..	..	..	..	..	..
Lye Making	12	..	..		..	..	..	..	..	..	..	..	..	..	..	..
Laundry	1	342	342	00	342	..	..	..	..	..	..	..	..	..	..	..
Offal Boiling	12	..	..		..	..	..	..	..	..	..	..	..	..	..	..
Pottery Works	6	..	..		..	..	..	..	..	..	..	..	..	..	..	..
Private Market	1	8	625	00	5	..	1	1	..	..	..	..	..	..	1	..
Rags and Bones Store	6	..	..		..	..	..	..	..	..	..	..	..	..	..	..
Sago Factory	50	5	245	83	4	..	..	..	..	..	..	..	..	..	..	1
Charcoal Making	12	32	362	14	21	..	..	..	..	..	..	..	..	..	11	..
Sheep or Goat Pen	12	2	5	00	..	1	..	..	1	..	..	..	..	..	..	..
Sugar Boiling	50	4	200	00	4	..	..	..	..	..	..	..	..	..	..	..
Soap Boiling	12	4	48	00	4	..	..	..	..	..	..	..	..	..	..	..
Sick Receiving House	1	6	6	00	6	..	..	..	..	..	..	..	..	..	..	..
Tannery	50	5	208	33	4	..	1	..	..	..	..	..	..	..	..	..
Importation of Frozen Meat		8	1,299	83	6	..	..	..	..	1	1	..	..	..	..	..
CATTLESHEDS, PONYSTABLES, COWSHEDS:																
9 Animals & Under per head @	1	3	19	00	3	..	..	..	..	..	..	..	..	..	..	..
10—14 Animals	10	2	20	00	2	..	..	..	..	..	..	..	..	..	..	..
15—24 „	15	..	..		..	..	..	..	..	..	..	..	..	..	..	..
25—50 „	25	..	..		..	..	..	..	..	..	..	..	..	..	..	..
Over 50 „	50	3	150	00	3	..	..	..	..	..	..	..	..	..	..	..
TOTAL	..	443	$4,006	45												

H. BENJAFIELD,
Chief Sanitary Inspector.

(D-131)

Municipal, Abattoir,

Singapore, 5th March, 1940.

The Municipal Health Officer,

Singapore.

Sir,

I have the honour to submit my report for the year ended 31st December, 1939. During this period 276,032 swine, 13,505 oxen, 32,334 sheep, 6,443 goats and 86 buffaloes were slaughtered in the Municipal Abattoirs making a total of 328,400 as against 321,596 during the previous year. The carcases of 653 swine, 29 oxen, 27 sheep, 23 goats and 1 buffalo were found to be so diseased as to require total condemnation. There was evidence of tuberculosis in the carcases of 735 swine and 5 oxen. Carcases and organs amounting to 164 tons 3 cwts. were destroyed at the Municipal incinerator. An additional hoist and overhead track were installed at the cattle section in August and the Weinberg Casting Pen is now in daily use. The writer was absent on home leave from April till December and during this period Mr. J. L. da Silva, senior assistant acted as superintendent. Mr. Byrne proceeded to England in August to study at the Royal Sanitary Institute but, owing to the outbreak of war, he was forced to return to Singapore in September as classes and examinations were, for the time being, abandoned by the Institute.

I have the honour to be,

Sir,

Your Obedient servant,

D. WILSON,

Abattoir Superintendent.

PARTICULARS OF ANIMALS ADMITTED FOR SLAUGHTER, Etc., DURING THE YEAR ENDED 31st DECEMBER, 1939.

	Swine	Oxen	Buff-aloes	Sheep	Goats
Admitted for slaughter during the year ended 31st December, 1939 ..	276,546	13,513	86	32,433	6,485
Admitted for slaughter during the year ended 31st December, 1938 ..	269,571	13,841	77	35,399	3,742
Died in pens	780	—	—	78	35
Brought in by ambulance	—	708	—	—	—
Carcases (complete) condemned as unfit for consumption	653	29	1	27	23
Diseased organs etc., condemned and destroyed, in tons	45.4	16.9	.2	3.7	1.5

Fees for slaughter at Cattle section	$ 13,599.00
„ „ „ „ Sheep Section	13,621.30
„ „ „ „ Pig Section	138,273.00
„ „ storage in chilling room	3,025.50
„ „ „ at French Road Depot	8,115.54
Receipts as pen rents (all slaughter houses)	7,469.55
„ for sale of blood	992.00
„ „ „ „ pigs' bristles	105.00
Total receipts for the year ended 31.12.39	$185,200.89
„ „ „ „ 31.12.38	$182,506.06

Special slaughtering licences issued during the year ended 31st December, 1939—

(6 pigs @ $5 each, 21 sheep and 13 goats @ $3.50 each) $149.00

CARCASES TOTALLY CONDEMNED DURING THE YEAR, 1939.

	Swine	Oxen	Buffaloes	Sheep	Goats	Total
Bruising, Extensive and Severe ..	7	1	—	2	—	10
Caseous Lymphadenitis	—	—	—	2	—	2
Cysticercus Bovis ..	–	11	—	—	—	11
Cysticercus Cellulosae .	355	—	—	—	—	355
Dropsy, General ..	4	—	—	—	—	4
Emaciation, General Pathological ..	16	8	—	8	8	40
Jaundice ..	31	6	—	1	—	38
Mammitis, Septic ..	—	1	—	—	1	2
Metritis, Septic ..	4	—	—	—	2	6
Moribund ..	1	—	—	3	2	6
Pericarditis, Septic . ..	1	—	—	—	—	1
Peritonitis, Septic ..	19	—	—	—	—	19
Pneumonia, Gangrenous	9	—	—	4	9	22
Pyrexia ..	160	1	—	7	—	168
Pyaemia ..	4	—	—	—	—	4
Sarcoma ..	—	—	—	—	1	1
Septicaemia ..	9	—	—	—	—	9
Swine Fever ..	26	—	—	—	—	26
Tuberculosis, Generalised	7	1	1	—	—	9
Total number of carcases condemned during 1939 ..	653	29	1	27	23	733
Total number of carcases condemned during 1938 ..	1,651	145	1	110	49	1,956

ANIMALS SLAUGHTERED MONTHLY, IN MUNICIPAL ABATTOIRS DURING THE YEAR 1939.

	Swine	Oxen	Buffaloes	Sheep	Goats
January	22,708	1,098	8	3,304	326
February	23,609	919	19	2,512	295
March	22,729	1,088	10	2,474	337
April	23,013	1,060	5	2,659	356
May	23,061	1,146	7	2,431	416
June	23,304	1,068	5	2,378	445
July	22,880	1,138	5	2,837	412
August	26,190	1,178	1	2,785	701
September	22,857	1,082	5	2,428	999
October	23,320	1,165	4	2,512	823
November	20,225	1,295	3	3,215	731
December	22,136	1,268	14	2,799	602
Total slaughtered during 1939 ..	276,032	13,505	86	32,334	6,443
Total slaughtered during 1938 ..	268,719	13,866	77	35,246	3,688